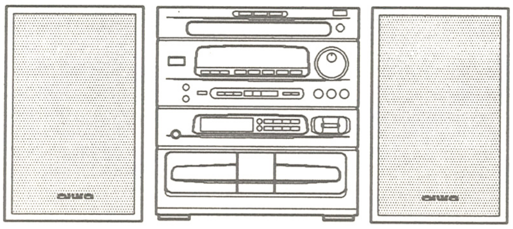
aiwa

CX-Z720
SX-Z720
SX-Z870



COMPACT DISC STEREO SYSTEM

- BASIC TAPE MECHANISM : 2ZM – 5 PR1N
- BASIC CD MECHANISM : KSM – 2101ABM
- TYPE. E, K, Z

CD – CASSEIVER	SPEAKERS	REMOTE CONTROLLER
CX – Z720	SX – Z720 or SX – Z870	RC – TZ720

SERVICE MANUAL

S/M Code No. 09 – 93C – 038 – 00T

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SPECIFICATIONS

<FM section>

Frequency range	87.5 MHz to 108 MHz
Usable sensitivity (IHF)	E, K: 1.3 µV (75 ohms) 13.2 dBf Z: 1.9 µV (75 ohms) 16.8 dBf
Alternate channel selectivity	50 dB (±400 kHz)
Signal-to-noise ratio	STEREO: 70 dB (E, K) 65 dB (Z) MONO: 76 dB (E, K) 73 dB (Z)
Harmonic distortion	0.3% (MONO), 1 kHz 0.5% (STEREO, L-R), 1 kHz
Frequency response	30 Hz to 15 kHz (+0.5 dB, -3 dB)
Stereo separation	E, K: 33 dB at 1 kHz Z: 30 dB at 1 kHz
Antenna	75 ohms (unbalanced)

<MW section>

Frequency range	531(530) kHz to 1,602(1,710) kHz
Usable sensitivity	350 µV/m
Selectivity	22 dB (9 kHz)
Signal-to-noise ratio	53 dB (100 dB input)
Antenna	Loop antenna

<LW section>

Frequency range	144 kHz to 290 kHz
Sensitivity	1,400 µV/m
Antenna	Loop antenna

<Timer section>

Program timer	On-timer, capable of free setting
Sleep timer	Capable of setting in 10-minute increments, 240 minutes maximum

<Amplifier section>

Power output	E, Z: 30W + 30W (6 ohms, T.H.D. 1% 1 kHz) K: 40 W + 40 W (6 ohms, T.H.D. 10%, 1 kHz) 30 W + 30 W (6 ohms, T.H.D. 1%, 1 kHz)
Harmonic distortion	0.07% (20W, 1 kHz, 6 ohms)
Input sensitivity	VIDEO/AUX: 150 mV (adjustable) PHONO: 300 mV

<Cassette deck section>

Track format	4 tracks, 2 channels
Frequency response	CrO$_2$ tape: 50-16,000 Hz NORMAL tape: 50-15,000 Hz
Signal-to-noise ratio	60 dB (DOLBY NR ON, CrO$_2$ tape peak level)
Tape speed	4.8 cm/sec ($1^{7}/_{8}$ ips)
Recording system	AC bias
Erasure system	AC erase
Motor	DC Servomotor x 1
Heads	Playback head x 1 (Deck1) Recording/playback/erasure head x 1 (Deck 2)

<CD player section>

Disc	Compact disc
Scanning method	Non contact optical scanner (semi-conductor laser application)
Laser	Semiconductor laser (λ = 780 nm)
Rotation speed	Approx. 500 rpm – 200 rpm (CLV)
Error correction	Cross Interleave, Reed Solomon code
No. of channels	2 channels
D-A conversion	16-bit linear
Wow/flutter	Unmeasurable
Signal-to-noise ratio	90 dB (1 kHz, 0 dB)
Harmonic distortion	0.05% (1 kHz, 0 dB)

<Speaker SX-Z870>

Cabinet type	3 way, bass reflex
Speaker	220 mm ($8^{3}/_{4}$ in.) cone type woofer 60 mm ($2^{3}/_{8}$ in.) cone type tweeter 30 mm ($1^{3}/_{16}$ in.) ceramic type super tweeter
Impedance	6 ohms
Music power	60 W
Output sound pressure level	90 dB/W/m
Dimensions (W x H x D)	260 x 432 x 215 mm ($10^{1}/_{4}$ x $17^{1}/_{8}$ x $8^{1}/_{2}$ in.)
Weight	4.6 kg (10.1 lbs.)

<General>

Power requirements	E, Z: AC 230 V, 50 Hz K: AC 240 V, 50 Hz.
Power consumption	210 W
Dimensions (W x H x D)	Center unit: 360 x 380.5 x 323.2 mm ($10^{1}/_{4}$ x 15 x $12^{3}/_{4}$ in.) System: 880 x 432 x 323.2 mm ($34^{3}/_{4}$ x $17^{1}/_{8}$ x $12^{3}/_{4}$ in.)
Weight	Center unit: 9 kg (19.8 lbs) System: 18.2 kg (40 lbs)

- Design and specifications are subject to change without notice.
- Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
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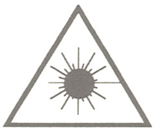
- The word "BBE" and the "BBE symbol" are trademarks of BBE Sound, Inc.
  Under license from BBE Sound, Inc.

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!!

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynlig laserståling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

VAROITUS!

Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

VARNING!

Om apparaten används på annat sätt än vad som specificeras i denna bruksanvising, kan användaren utsättas för osynling laserstrålning, som överskrider gränsen för laserklass 1.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

ATTENTION

L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL!

Usynlig laserståling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

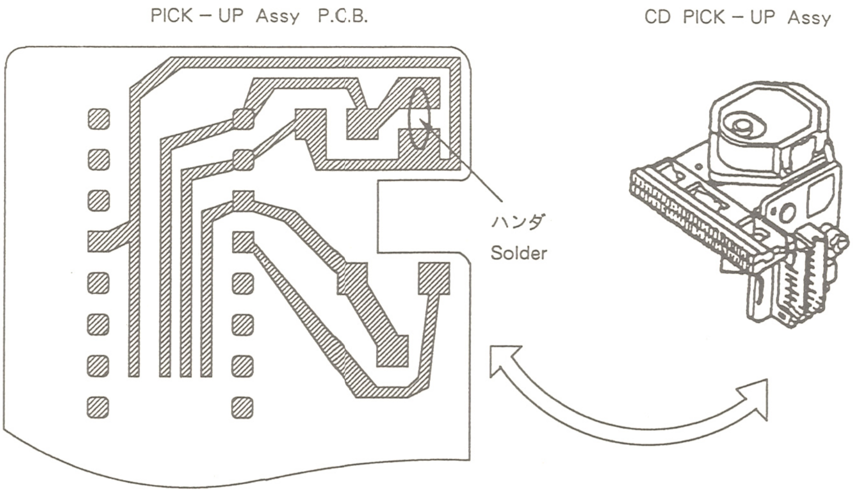
This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.

CLASS 1	LASER PRODUCT
KLASSE 1	LASER PRODUKT
LUOKAN 1	LASER LAITE
KLASS 1	LASER APPARAT

Precaution to replace Optical block (KSS – 210A)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

1) After the connection, remove solder shown in figure below.



ELECTRICAL MAIN PARTS LIST

DESCRIPTIONで判断できない物は “REFERENCE NAME LIST” を参照してください。
If can't understand for Description please kindly refer to “REFERENCE NAME LIST”.

IC

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
	87-020-793-080		IC, CXA-1081M
	87-020-454-010		IC, DN6851
	87-020-794-110		IC, CXA-1082BQ
	87-001-944-010		IC, CXD-1167Q
	87-017-429-089		IC, TDA1311A(T)
	87-002-639-089		IC, BA6296FP
	87-002-394-019		IC, LB1641
	87-017-194-010		IC, PLT104
	87-017-448-019		IC, GD4052B
	83-MA1-624-010		IC, UPD78044GF-040
	87-002-950-019		IC, BA3826S
	87-002-727-019		IC, NJM4558L
	87-017-373-019		IC, NJH32H380A
	87-020-966-019		IC, STK4142-MK2
	87-020-758-019		IC, NJM2068SD
	87-017-374-019		IC, TC4094BP
	87-001-530-019		IC, LA3607
	87-001-528-019		IC, LC7522
	87-001-874-019		IC, HA12134A
	87-001-607-089		IC, NJM4558M
	87-002-282-019		IC, BU4066B
	87-002-218-010		IC, XRC5451AP
	87-017-311-080		IC, M65831FP
	87-002-607-019		IC, LM7001
	87-017-434-019		IC, KIA6043S
	87-001-942-019		IC, LA1265S(G)

TRANSISTOR

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
	87-026-463-089		TR, 2SA933S(RS)
	89-109-521-089		TR, 2SA952K
	87-026-233-089		TR, DTA114TK
	87-026-612-089		C-TR, RN1408
	89-113-187-889		TR, 2SA1318TU
	89-213-292-089		TR, 2SB1329Q
	89-327-124-089		C-TR, 2SC2712Y
	89-333-317-089		TR, 2SC3331T
	87-026-213-089		C-TR, DTC114YK T147
	87-026-238-089		C-TR, DTC144WK
	89-213-702-019		TR, 2SB1370E
	87-026-609-089		TR, 2SA1266GR
	89-332-665-089		TR, 2SC3266GR
	87-026-610-089		TR, 2SC3198GR
	87-026-462-089		TR, 2SC1740S(RS)
	89-318-155-089		TR, 2SC1815GR
	89-327-125-089		C-TR, 2SC2712GR
	89-406-555-089		TR, 2SD655E
	87-026-226-089		C-TR, DTA143EK
	87-026-227-089		C-TR, DTA114EK
	89-413-023-089		TR, 2SD1302S
	87-026-292-089		TR, DTA144WS
	87-026-217-089		TR, DTC124ES
	87-026-218-089		TR, DTC144ES
	87-026-210-089		C-TR, DTC144EK T147
	89-503-655-089		FET, 2SK365GR, BL
	89-110-155-089		TR, 2SA1015GR
	87-026-289-089		TR, DTC143XS(TP)
	87-026-228-089		C-TR, DTA124EK
	89-502-464-089		FET, 2SK246Y
	89-318-154-089		TR, 2SC1815Y
	87-026-214-089		TR, DTA114YS
	89-319-233-089		TR, 2SC1923(O)
	89-502-415-089		FET, 2SK241GR
	89-501-615-089		TR, 2SK161-GR(TPE4)
	89-320-011-089		TR, 2SC2001K

DIODE

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
	87-002-836-089		DIODE, 1A3-J
	87-002-564-089		DIODE, 1SS133RA
	87-017-091-059		ZENER, HZS5C1RA
	87-017-163-059		ZENER, HZS9A1LRA
	87-020-125-089		C-DIODE, 1SS181
	87-002-225-010		DIODE, DBF40C-K10
	87-017-011-089		DIODE, LTIN4003L
	87-001-574-089		DIODE, 1SR139-200T31
	87-020-691-089		DIODE, 1SS132T-72
	87-001-559-089		DIODE, ISS131(T-72)
	87-017-483-089		ZENER, UZ-10BSC
	87-002-743-089		ZENER, MTZJ33B
	87-001-913-089		ZENER, UTZJ5. 6B
	87-001-731-089		ZENER, HZS6C2L
	87-017-437-089		DIODE, 1N4148M
	87-001-911-088		ZENER, UTZJ4. 7A
	87-001-915-088		ZENER, UTZJ6. 8A
	87-020-027-089		C-DIODE, 1SS184
	87-001-290-089		ZENER, HZS6B1L
	87-002-843-089		DIODE, 1SS108
	87-017-435-089		ZENER, UZ-5. 1BSB

MAIN C.B

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
BPF731	82-794-697-019		FILTER ANTI BIRDIE<Z>
BPF831	87-030-105-010		FLTR, BPMB6A<Z>
C101	87-016-055-099		CAP, E 3300-42 HI-R
C102	87-016-055-099		CAP, E 3300-42 HI-R
C103	87-010-390-099		CAP, E 3300-25 SME
C104	87-010-980-089		CAP, E 330-16 FS
C105	87-010-101-08B		CAP, E 220-16 SME 8X12
C106	87-010-764-089		CAP, E 47-63V
C107	87-010-384-08C		CAP, E 100-25 SME 8X12
C108	87-010-408-08C		CAP, E 47-50 SME 8X12
C109	87-010-263-08B		CAP, E 100-10 SME 5X11
C110	87-010-263-089		CAP, E 100-10 SME 5X11
C111	87-010-370-089		CAP, E 330/6. 3 SME
C112	87-010-260-089		CAP, E 47-25 SME
C113	87-010-403-08B		CAP, E 3. 3-50 SME 5X11
C115	87-018-214-089		CAP, TC-U 0. 1-50 F<Z>
C116	87-018-127-089		CAP, TC-U 470P-50 B
C117	87-016-145-089		CAP, E 10-50 KME
C118	87-018-214-089		CAP, TC-U 0. 1-50 F<Z>
C119	87-018-214-089		CAP, TC-U 0. 1-50 F<Z>
C120	87-018-214-089		CAP, TC-U 0. 1-50 F<Z>
C121	87-018-214-089		CAP, TC-U 0. 1-50 F<Z>
C122	87-018-214-089		CAP, TC-U 0. 1-50 F<Z>
C205	87-016-073-089		CAP, E 1-50 FX
C206	87-016-073-089		CAP, E 1-50 FX
C207	87-010-401-089		CAP, E 1-50 SME
C208	87-010-401-089		CAP, E 1-50 SME
C209	87-018-134-089		CAP, TC-U 0. 01-16 Y
C210	87-018-134-089		CAP, TC-U 0. 01-16 Y
C211	87-010-401-089		CAP, E 1-50 SME
C212	87-010-401-089		CAP, E 1-50 SME
C213	87-010-402-089		CAP, E 2. 2-50 SME
C214	87-010-402-089		CAP, E 2. 2-50 SME
C215	87-018-131-089		CAP, TC-U 1000P-50 B
C216	87-018-131-089		CAP, TC-U 1000P-50 B
C217	87-010-401-089		CAP, E 1-50 SME
C218	87-010-401-089		CAP, E 1-50 SME
C221	87-010-400-08B		CAP, E 0. 47-50 SME 5X11
C222	87-010-400-08B		CAP, E 0. 47-50 SME 5X11
C223	87-010-260-08C		CAP, E 47-25 SME 6X11
C224	87-010-260-08C		CAP, E 47-25 SME 6X11
C225	87-016-130-089		CAP, E 47-25 KME
C226	87-016-130-089		CAP, E 47-25 KME
C227	87-018-214-089		CAP, TC-U 0. 1-50 F
C228	87-018-214-089		CAP, TC-U 0. 1-50 F

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
C233	87-010-546-08B		CAP, E 0. 33-50 SME 5X11
C234	87-010-263-08B		CAP, E 100-10 SME 5X11
C235	87-010-260-08C		CAP, E 47-25 SME 6X11
C236	87-010-408-08C		CAP, E 47-50 SME 8X12
C237	87-010-403-089		CAP, E 3. 3-50 SME
C238	87-010-403-089		CAP, E 3. 3-50 SME
C241	87-018-134-089		CAP, TC-U 0. 01-16 Y<Z>
C242	87-018-134-089		CAP, TC-U 0. 01-16 Y<Z>
C243	87-018-104-089		CAP, TC-U 10P-50 SL<E, K>
C243	87-018-109-089		CAP, TC-U 22P-50 SL<Z>
C244	87-018-104-089		CAP, TC-U 10P-50 SL<E, K>
C244	87-018-109-089		CAP, TC-U 22P-50 SL<Z>
C245	87-018-119-089		CAP, TC-U 100P-50 B
C246	87-018-119-089		CAP, TC-U 100P-50 B
C247	87-018-134-089		CAP, TC-U 0. 01-16 Y<Z>
C251	87-018-119-089		CAP, TC-U 100P-50 B<Z>
C252	87-018-119-089		CAP, TC-U 100P-50 B<Z>
C303	87-018-122-089		CAP, TC-U 180P-50 B
C304	87-018-122-089		CAP, TC-U 180P-50 B
C309	87-018-134-089		CAP, TC-U 0. 01-16 Y
C310	87-018-134-089		CAP, TC-U 0. 01-16 Y
C313	87-018-205-089		CAP, TC-U 0. 022-25 F
C314	87-010-260-089		CAP, E 47-25 SME
C351	87-018-121-089		CAP, TC-U 150P-50 B
C352	87-018-121-089		CAP, TC-U 150P-50 B
C353	87-018-124-089		CAP, TC-U 270P-50 B
C354	87-018-124-089		CAP, TC-U 270P-50 B
C355	87-010-260-08C		CAP, E 47-25 SME 6X11
C361	87-018-134-089		CAP, TC-U 0. 01-16 Y
C362	87-018-134-089		CAP, TC-U 0. 01-16 Y
C365	87-018-205-089		CAP, TC-U 0. 022-25 F
C366	87-018-134-089		CAP, TC-U 0. 01-16 Y<Z>
C367	87-018-119-089		CAP, TC-U 100P-50 B<Z>
C401	87-010-402-089		CAP, E 2. 2-50 SME
C402	87-010-402-089		CAP, E 2. 2-50 SME
C403	87-018-132-089		CAP, TC-U 2200P-16 X
C404	87-018-132-089		CAP, TC-U 2200P-16 X
C407	87-010-401-089		CAP, E 1-50 SME
C408	87-010-401-089		CAP, E 1-50 SME
C415	87-018-121-089		CAP, TC-U 150P-50 B
C416	87-018-121-089		CAP, TC-U 150P-50 B
C451	87-018-123-089		CAP, TC-U 220P-50 B
C452	87-018-123-089		CAP, TC-U 220P-50 B
C453	87-018-131-089		CAP, TC-U 1000P-50 B
C455	87-018-131-089		CAP, TC-U 1000P-50 B
C456	87-010-260-089		CAP, E 47-25 SME
C459	87-018-198-089		CAP, TC-U 2700P-16 X
C501	87-010-405-089		CAP, E 10-50 SME
C502	87-010-405-089		CAP, E 10-50 SME
C503	87-018-195-089		CAP, TC-U 1200P-16 X
C504	87-018-195-089		CAP, TC-U 1200P-16 X
C505	87-010-401-089		CAP, E 1-50 SME
C506	87-010-401-089		CAP, E 1-50 SME
C507	87-018-131-089		CAP, TC-U 1000P-50 B
C508	87-018-131-089		CAP, TC-U 1000P-50 B
C509	87-010-371-08B		CAP, E 470-6. 3 SME 8X12
C515	87-010-545-08B		CAP, E 0. 22-50 SME 5X11
C516	87-010-545-08B		CAP, E 0. 22-50 SME 5X11
C517	87-010-400-089		CAP, E 0. 47-50 SME
C518	87-010-400-089		CAP, E 0. 47-50 SME
C520	87-018-134-089		CAP, TC-U 0. 01-16 Y<Z>
C581	87-010-405-089		CAP, E 10-50 SME
C582	87-010-405-089		CAP, E 10-50 SME
C590	87-018-134-089		CAP, TC-U 0. 01-16 Y
C601	87-010-401-08B		CAP, E 1-50 SME 5X11
C602	87-010-401-08B		CAP, E 1-50 SME 5X11
C605	87-018-121-089		CAP, TC-U 150P-50 B
C606	87-018-121-089		CAP, TC-U 150P-50 B
C607	87-018-134-089		CAP, TC-U 0. 01-16 Y
C608	87-018-134-089		CAP, TC-U 0. 01-16 Y
C609	87-010-401-08B		CAP, E 1-50 SME 5X11
C610	87-010-401-08B		CAP, E 1-50 SME 5X11
C611	87-010-404-08B		CAP, E 4. 7-50 SME 5X11
C612	87-010-404-08B		CAP, E 4. 7-50 SME 5X11
C615	87-018-198-089		CAP, TC-U 2700P-16 X
C616	87-018-198-089		CAP, TC-U 2700P-16 X
C617	87-018-122-089		CAP, TC-U 180P-50 B
C618	87-018-122-089		CAP, TC-U 180P-50 B
C621	87-010-400-08B		CAP, E 0. 47-50 SME 5X11
C622	87-010-400-08B		CAP, E 0. 47-50 SME 5X11
C623	87-010-400-08B		CAP, E 0. 47-50 SME 5X11
C624	87-010-404-08B		CAP, E 4. 7-50 SME 5X11
C628	87-010-404-089		CAP, E 4. 7-50 SME
C630	87-010-405-089		CAP, E 10-50 SME
C631	87-010-401-08B		CAP, E 1-50 SME 5X11
C632	87-010-401-08B		CAP, E 1-50 SME 5X11
C633	87-010-101-089		CAP, E 220-16 SME
C635	87-010-405-08B		CAP, E 10-50 SME 5X11
C636	87-010-404-089		CAP, E 4. 7-50 SME
C681	87-010-405-089		CAP, E 10-50 SME
C700	87-010-221-089		CAP, E 470-10
C701	87-010-384-089		CAP, E 100-25 SME
C702	87-010-404-089		CAP, E 4. 7-50 SME
C703	87-018-134-089		CAP, TC-U 0. 01-16 Y
C705	87-010-248-08B		CAP, E 220-10 SME 6X11
C706	87-018-134-089		CAP, TC-U 0. 01-16 Y
C707	87-018-134-089		CAP, TC-U 0. 01-16 Y
C708	87-018-134-089		CAP, TC-U 0. 01-16 Y
C713	87-018-199-089		CAP, TC-U 3300P-16 X
C714	87-018-199-089		CAP, TC-U 3300P-16 X
C715	87-018-195-089		CAP, TC-U 1200P-16 X
C716	87-018-195-089		CAP, TC-U 1200P-16 X
C720	87-018-121-089		CAP, TC-U 150P-50 B
C721	87-010-401-089		CAP, E 1-50 SME
C722	87-010-401-089		CAP, E 1-50 SME
C723	87-010-405-08B		CAP, E 10-50 SME 5X11
C724	87-014-057-089		CAP, PP 1000P-100 J
C725	87-010-401-089		CAP, E 1-50 SME
C726	87-010-403-089		CAP, E 3. 3-50 SME
C727	87-010-248-089		CAP, E 220-10 SME
C728	87-010-402-089		CAP, E 2. 2-50 SME<Z>
C729	87-010-402-089		CAP, E 2. 2-50 SME<Z>
C731	87-018-134-089		CAP, TC-U 0. 01-16 Y
C732	87-018-134-089		CAP, TC-U 0. 01-16 Y
C733	87-018-205-089		CAP, TC-U 0. 022-25 F
C734	87-018-119-089		CAP, TC-U 100P-50 B<Z>
C741	87-010-402-089		CAP, E 2. 2-50 SME
C742	87-018-125-089		CAP, TC-U 330P-50 B
C743	87-010-382-089		CAP, E 22-25 SME
C744	87-018-134-089		CAP, TC-U 0. 01-16 Y
C745	87-018-134-089		CAP, TC-U 0. 01-16 Y
C746	87-010-401-089		CAP, E 1-50 SME
C748	87-010-404-089		CAP, E 4. 7-50 SME
C749	87-010-405-089		CAP, E 10-50 SME
C750	87-010-544-089		CAP, E 0. 1-50
C751	87-010-403-089		CAP, E 3. 3-50 SME
C752	87-018-134-089		CAP, TC-U 0. 01-16 Y
C754	87-010-260-089		CAP, E 47-25 SME
C755	87-010-401-089		CAP, E 1-50 SME
C756	87-018-134-089		CAP, TC-U 0. 01-16 Y
C760	87-018-134-089		CAP, TC-U 0. 01-16 Y<E, K>
C802	87-018-102-089		CAP, TC-U 6. 8P-50 SL
C804	87-018-102-089		CAP, TC-U 6. 8P-50 SL<E, K>
C805	87-018-097-089		CAP, TC-U 2. 2P-50 SL<Z>
C805	87-018-098-089		CAP, TC-U 3. 3P-50 SL<E, K>
C806	87-018-096-089		CAP, TC-U 1P-50 SL
C807	87-018-106-089		CAP, TC-U 15P-50 SL<Z>
C807	87-018-100-089		CAP, TC-U 4. 7P-50 SL<E, K>
C808	87-018-119-089		CAP, TC-U 100P-50 B
C809	87-018-134-089		CAP, TC-U 0. 01-16 Y

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
C810	87-018-134-089		CAP, TC-U 0. 01-16 Y
C811	87-018-116-089		CAP, TC-U 56P-50 SL
C812	87-018-107-089		CAP, TC-U 18P-50 SL
C813	87-018-134-089		CAP, TC-U 0. 01-16 Y
C814	87-018-134-089		CAP, TC-U 0. 01-16 Y
C815	87-018-134-089		CAP, TC-U 0. 01-16 Y
C816	87-018-134-089		CAP, TC-U 0. 01-16 Y
C817	87-018-134-089		CAP, TC-U 0. 01-16 Y
C818	87-018-134-089		CAP, TC-U 0. 01-16 Y
C819	87-018-134-089		CAP, TC-U 0. 01-16 Y
C820	87-010-260-089		CAP, E 47-25 SME
C821	87-018-134-089		CAP, TC-U 0. 01-16 Y
C822	87-018-103-089		CAP, TC-U 8. 2P-50 SL
C823	87-018-107-089		CAP, TC-U 18P-50 SL
C830	87-018-214-089		CAP, TC-U 0. 1-50 F〈E, K〉
C830	87-018-134-089		CAP, TC-U 0. 01-16 Y〈Z〉
C831	87-018-105-089		CAP, TC-U 12P-50 SL〈Z〉
C831	87-018-102-089		CAP, TC-U 6. 8P-50 SL〈E, K〉
C832	87-018-108-089		CAP, TC-U 20P-50 SL〈Z〉
C833	87-018-134-089		CAP, TC-U 0. 01-16 Y〈E, K〉
C833	87-018-205-089		CAP, TC-U 0. 022-25 F〈Z〉
C834	87-018-103-089		CAP, TC-U 8. 2P-50 SL〈Z〉
C839	87-018-134-089		CAP, TC-U 0. 01-16 Y
C848	87-018-113-089		CAP, TC-U 33P-50 B〈Z〉
C941	87-018-134-089		CAP, TC-U 0. 01-16 Y
C942	87-018-105-089		CAP, TC-U 12P-50 SL
C944	87-018-104-089		CAP, TC-U 10P-50 SL
C945	87-014-050-089		CAP, PP 510P-100 J
C946	87-010-401-089		CAP, E 1-50 SME
C950	87-018-119-089		CAP, TC-U 100P-50 B〈Z〉
C983	87-010-544-089		CAP, E 0. 1-50
C990	87-018-134-089		CAP, TC-U 0. 01-16 Y
CF741	82-794-670-019		BFU 450C4N
CF801	82-799-621-019		CF MS2-A〈Z〉
CF801	87-008-261-019		FLTR, SFE10. 7MA5-A〈E, K〉
CF802	87-008-261-019		FLTR, SFE10. 7MA5-A
CF803	87-008-261-019		FLTR, SFE10. 7MA5-A〈Z〉
D801	87-027-900-019		VARI-CAP, 1SV147
D802	87-027-900-019		VARI-CAP, 1SV147
D803	87-027-900-019		VARI-CAP, 1SV147
D804	87-027-900-019		VARI-CAP, 1SV147〈Z〉
FT101	83-MA1-654-019		F-CABLE, 7P-2. 0 CD
FT102	83-MA1-752-019		F-CABLE, 7P-2. 5
J250	87-049-855-019		JACK, 6. 3 W/S
J253	80-MT3-631-019		JACK, PIN 2P EARTH〈Z〉
J254	87-033-226-019		TERMINAL, SP 4P (JT)〈E, K〉
J254	87-033-227-019		TERMINAL, SP 4P R (Z)〈Z〉
J652	82-MA2-631-010		JACK, PIN 4P RVS
J801	81-631-646-019		ANT TERM 2P PAL
J902	81-754-629-019		CONNECTOR XH M 2P (UL)〈E, K〉
L201	87-005-366-019		COIL, 1UH〈Z〉
L202	87-005-366-019		COIL, 1UH〈Z〉
L401	87-003-131-089		COIL, 10MH J
L402	87-003-131-089		COIL, 10MH J
L403	82-231-622-089		COIL, 22UH-J
L404	82-231-622-089		COIL, 22UH-J
L451	87-007-312-019		COIL, OSC BIAS 85K
L701	87-006-235-010		COIL, TRAP MPX
L702	87-006-235-010		COIL, TRAP MPX
L741	81-631-611-019		COIL, QUAD (SINGLE)
L742	87-008-491-019		FLTR, PACFAZ 450
L801	87-006-198-019		COIL, ANT FM 2-3/4TS, L5
L802	87-006-219-019		COIL, ANT FM 3/4T, S
L803	87-006-200-019		COIL, RF FM 3-1/2T, L5
L804	87-006-220-019		COIL, RF FM 3-1/2T, L5 S
L805	87-003-098-089		COIL, 2. 2UH
L806	87-003-145-089		COIL, 8. 2UH LAL02
L807	87-006-230-119		COIL, FM OSC (7K)
L831	87-006-202-019		COIL, RF FM4TSR, L5〈Z〉
L832	87-003-098-089		COIL, 2. 2UH
L941	87-006-234-019		COIL, ANT LW S
L942	87-007-323-019		COIL, OSC LW S
R105	87-022-050-089		RESIS METAL 1W-0. 22J
R106	87-022-050-089		RESIS METAL 1W-0. 22J
R243	87-022-391-089		RES, M/F 0. 47-1W
R244	87-022-391-089		RES, M/F 0. 47-1W
R257	87-022-391-089		RES, M/F 0. 47-1W
R258	87-022-391-089		RES, M/F 0. 47-1W
RY101	87-045-335-010		RELAY, G5Z-2A 12VDC
SFR301	87-024-349-089		SFR, 1K DIA6 H
SFR302	87-024-349-089		SFR, 1K DIA6 H
SFR351	87-024-168-089		SFR, 1K DIA6 V
SFR352	87-024-168-089		SFR, 1K DIA6 V
SFR401	87-024-171-089		SFR, 4. 7K DIA6 V
SFR402	87-024-171-089		SFR, 4. 7K DIA6 V
SFR451	87-024-175-089		SFR, 47K DIA6 V
SFR452	87-024-175-089		SFR, 47K DIA6 V
SFR571	87-024-353-089		SFR, 10K DIA6 H
SFR721	87-024-171-089		SFR, 4. 7K DIA6 V
SFR722	87-024-174-089		SFR, 33K DIA6 V
TC701	87-011-221-089		TRIMER, 30P VCT51
TC801	87-011-219-089		CAP, TRIMMER 10P VCT
TC802	87-011-219-089		CAP, TRIMMER 10P VCT
TC803	87-011-219-089		CAP, TRIMMER 10P VCT〈Z〉
TC942	87-011-221-089		TRIMMER, 30P VCT51
TU101	87-042-147-019		AM PACK 4
VR651	81-MX4-636-019		VR, 50KBX2 RK14K12A0
X701	87-030-163-019		VIB, XTAL 7. 2MHZ(NDK)

FRONT C. B

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
C201	87-010-196-089		C-CAP, S 0. 1-25 F
C202	87-010-196-089		C-CAP, S 0. 1-25 F
C203	87-010-196-089		C-CAP, S 0. 1-25 F
C220	87-010-421-089		CAP, E 4. 7-50 5L
C221	87-010-421-089		CAP, E 4. 7-50 5L
C221	87-010-404-089		CAP, E 4. 7-50 SME
C222	87-010-408-089		CAP, E 47-50 SME
C223	87-015-699-089		CAP, E 10-50 7L
C224	87-010-401-089		CAP, E 1-50 SME
C225	87-010-263-089		CAP, E 100-10 SME 5X11
C226	87-010-401-089		CAP, E 1-50 SME
C227	87-010-248-089		CAP, E 220-10 SME
C228	87-010-196-089		C-CAP, S 0. 1-25 F
C229	87-010-178-089		C-CAP, S 1000P-50 B
C230	87-010-196-089		C-CAP, S 0. 1-25 F
C232	87-010-178-089		C-CAP, S 1000P-50 B
C301	87-010-196-089		C-CAP, S 0. 1-25 F
C302	87-010-196-089		C-CAP, S 0. 1-25 F
C401	87-010-404-089		CAP, E 4. 7-50 SME
C402	87-010-404-089		CAP, E 4. 7-50 SME
C403	87-010-404-089		CAP, E 4. 7-50 SME
C404	87-010-404-089		CAP, E 4. 7-50 SME
C405	87-010-404-089		CAP, E 4. 7-50 SME
C406	87-010-421-089		CAP, E 4. 7-50 5L
C406	87-010-404-089		CAP, E 4. 7-50 SME
C407	87-010-140-089		C-CAP, S 470P CH
C408	87-010-140-089		C-CAP, S 470P CH
C409	87-010-186-089		C-CAP, S 4700P-50 B
C410	87-010-186-089		C-CAP, S 4700P-50 B
C411	87-010-172-089		C-CAP, S 330P-50 SL
C412	87-010-172-089		C-CAP, S 330P-50 SL
C415	87-010-176-089		C-CAP, S 680P-50 SL
C416	87-010-176-089		C-CAP, S 680P-50 SL
C419	87-010-182-089		C-CAP, S 2200P-50 B
C420	87-010-182-089		C-CAP, S 2200P-50 B
C423	87-010-187-089		C-CAP, S 5600P-50 B
C424	87-010-187-089		C-CAP, S 5600P-50 B
C425	87-010-545-089		CAP, E 0. 22-50 SME
C426	87-010-068-089		CAP, E 0. 22-50 5L

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
C429	87-010-400-089		CAP, E 0. 47-50 SME
C430	87-010-070-089		CAP, E 0. 47-50 5L
C433	87-010-402-089		CAP, E 2. 2-50 SME
C434	87-010-072-089		CAP, E 2. 2-50 5L
C437	87-010-244-089		CAP, E 22-16 5L
C438	87-010-404-089		CAP, E 4. 7-50 SME
C439	87-010-404-089		CAP, E 4. 7-50 SME
C440	87-010-244-089		CAP, E 22-16 5L
C441	87-010-263-089		CAP, E 100-10 SME 5X11
C442	87-010-196-089		C-CAP, S 0. 1-25 F
C443	87-010-173-089		C-CAP, S 390P-50 SL
C445	87-010-196-089		C-CAP, S 0. 1-25 F
C501	87-010-401-089		CAP, E 1-50 SME
C502	87-010-401-089		CAP, E 1-50 SME
C503	87-010-248-089		CAP, E 220-10 SME
C504	87-010-060-089		CAP, E 100-16 7L
C507	87-010-196-089		C-CAP, S 0. 1-25 F
C508	87-010-060-089		CAP, E 100-16 7L
C509	87-010-166-089		C-CAP, S 100P-50 SL
C510	87-010-166-089		C-CAP, S 100P-50 SL
C511	87-010-166-089		C-CAP, S 100P-50 SL
C512	87-010-166-089		C-CAP, S 100P-50 SL
C513	87-010-196-089		C-CAP, S 0. 1-25 F
C602	87-010-179-089		C-CAP, S 1200P-50 B
C603	87-010-071-089		CAP, E 1-50 5L
C604	87-010-071-089		CAP, E 1-50 5L
C605	87-010-172-089		C-CAP, S 330P-50 SL
C606	87-015-699-089		CAP, E 10-50 7L
C607	87-010-545-089		CAP, E 0. 22-50 SME
C608	87-010-170-089		C-CAP, S 220P-50 SL
C609	87-010-248-089		CAP, E 220-10 SME
C620	87-010-197-089		C-CAP, S 0. 01-25 B
C621	87-010-318-089		C-CAP, S 47P-50 CH
C622	87-010-197-089		C-CAP, S 0. 01-25 B
C623	87-015-699-089		CAP, E 10-50 7L
C624	87-015-695-089		CAP, E 1-50 7L
C701	87-010-544-089		CAP, E 0. 1-50
C702	87-010-178-089		C-CAP, S 1000P-50 B
C703	87-010-187-089		C-CAP, S 5600P-50 B
C704	87-010-196-089		C-CAP, S 0. 1-25 F
C705	87-010-260-089		CAP, E 47-25 SME
C707	87-010-197-089		C-CAP, S 0. 01-25 B
C709	87-010-401-089		CAP, E 1-50 SME
C710	87-010-196-089		C-CAP, S 0. 1-25 F
C711	87-010-187-089		C-CAP, S 5600P-50 B
C712	87-010-178-089		C-CAP, S 1000P-50 B
C713	87-010-263-089		CAP, E 100-10 SME 5X11
C714	87-010-196-089		C-CAP, S 0. 1-25 F
C715	87-010-316-089		C-CAP, S 33P-50 CH
C716	87-010-316-089		C-CAP, S 33P-50 CH
FL101	83-MA1-621-019		FL, BJ173GK
FT201	82-NF5-651-019		CABLE FFC 14P-1. 25
FT202	83-MA1-760-019		FLAT CABLE 6P
LED301	87-017-508-080		LED, SEL2515 C
LED302	87-017-508-080		LED, SEL2515 C
LED303	87-017-508-080		LED, SEL2515 C
LED304	87-017-508-080		LED, SEL2515 C
LED305	87-017-508-080		LED, SEL2515 C
LED306	87-017-508-080		LED, SEL2515 C
LED307	87-017-508-080		LED, SEL2515 C
LED308	87-017-508-080		LED, SEL2515 C
LED309	87-017-508-080		LED, SEL2515 C
LED310	87-017-508-080		LED, SEL2515 C
LED311	87-017-508-080		LED, SEL2515 C
LED312	87-017-508-080		LED, SEL2515 C
LED313	87-017-508-080		LED, SEL2515 C
LED314	87-017-508-080		LED, SEL2515 C
LED315	87-017-508-080		LED, SEL2515 C
LED316	87-017-297-080		LED, SEL1550CM TP7
LED317	87-017-297-080		LED, SEL1550CM TP7
LED318	87-017-297-080		LED, SEL1550CM TP7
LED319	87-017-297-080		LED, SEL1550CM TP7
LED320	87-017-297-080		LED, SEL1550CM TP7
LED321	87-017-297-080		LED, SEL1550CM TP7
LED322	87-017-468-089		LED, L-503ID
LED323	87-017-468-089		LED, L-503ID
LED324	87-017-468-089		LED, L-503ID
LED325	87-017-468-089		LED, L-503ID
LED326	87-017-468-089		LED, L-503ID
LED327	87-017-468-089		LED, L-503ID
MVR502	83-MA1-660-019		VOL, 50KB*2 (M)
S301	87-036-170-089		SW, TACT
S302	87-036-170-089		SW, TACT
S303	87-036-170-089		SW, TACT
S304	87-036-170-089		SW, TACT
S305	87-036-170-089		SW, TACT
S306	87-036-170-089		SW, TACT
S307	87-036-170-089		SW, TACT
S308	87-036-170-089		SW, TACT
S309	87-036-170-089		SW, TACT
S310	87-036-170-089		SW, TACT
S311	87-036-170-089		SW, TACT
S312	87-036-170-089		SW, TACT
S313	87-036-170-089		SW, TACT
S314	87-036-170-089		SW, TACT
S315	87-036-170-089		SW, TACT
S316	87-036-170-089		SW, TACT
S317	87-036-170-089		SW, TACT
S318	87-036-170-089		SW, TACT
S319	87-036-170-089		SW, TACT
S320	87-036-170-089		SW, TACT
S321	87-036-170-089		SW, TACT
S322	87-036-170-089		SW, TACT
S323	87-036-170-089		SW, TACT
S324	87-036-170-089		SW, TACT
S325	87-036-170-089		SW, TACT
S326	87-036-170-089		SW, TACT
S327	87-036-170-089		SW, TACT
S328	87-036-170-089		SW, TACT
S329	87-036-170-089		SW, TACT
S330	87-036-170-089		SW, TACT
S331	87-036-170-089		SW, TACT
S332	87-036-170-089		SW, TACT
S333	87-036-170-089		SW, TACT
S334	87-036-170-089		SW, TACT
VR501	82-MA2-634-019		VR, 50KB C. C C. T
VR601	81-MX4-637-019		VR, 10KA RK11K1130
VR602	83-MA1-661-019		VR, SL 10KB
X201	87-008-394-089		CF CST 4. 19 MGW
X701	87-030-211-089		VIB, CER KBR-2. 0MS

JACK C. B

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
J601	87-009-204-019		JACK, 6. 3 YKB21-5012

KEY C. B

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
LED801	87-017-351-080		LED, SEL681A
LED802	87-017-351-080		LED, SEL681A
LED803	87-017-351-080		LED, SEL681A
LED804	87-017-351-080		LED, SEL681A
LED805	87-017-351-080		LED, SEL681A
LED806	87-017-351-080		LED, SEL681A
LED807	87-017-351-080		LED, SEL681A
LED808	87-017-351-080		LED, SEL681A
LED809	87-017-351-080		LED, SEL681A
S801	87-036-170-089		SW, TACT
S802	87-036-170-089		SW, TACT
S803	87-036-170-089		SW, TACT
S804	87-036-170-089		SW, TACT

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
S805	87-036-170-089		SW, TACT

AC C. B

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
R101	87-025-507-089		RES, NF 0. 22-1W
⚠PT101	83-MA1-611-019		PT, EKZ

CD C. B

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
C2	87-010-146-089		C-CAP, S 2P-50 CH
C3	87-010-154-089		C-CAP, S 10P-50 CH
C4	87-010-263-089		CAP, E 100-10 SME 5X11
C5	87-010-178-089		C-CAP, S 1000P-50 B
C6	87-010-382-089		CAP, E 22-25 SME
C7	87-010-197-089		C-CAP, S 0. 01-25 B
C8	87-010-248-089		CAP, E 220-10 SME
C9	87-010-193-089		C-CAP, S 0. 033-25 F
C10	87-010-188-089		C-CAP, S 6800P-50 B
C11	87-010-188-089		C-CAP, S 6800P-50 B
C12	87-010-193-089		C-CAP, S 0. 033-25 F
C13	87-010-193-089		C-CAP, S 0. 033-25 F
C14	87-010-197-089		C-CAP, S 0. 01-25 B
C15	87-010-263-089		CAP, E 100-10 SME 5X11
C16	87-010-197-089		C-CAP, S 0. 01-25 B
C17	87-010-248-089		CAP, E 220-10 SME
C18	87-010-404-089		CAP, E 4. 7-50 SME
C19	87-010-197-089		C-CAP, S 0. 01-25 B
C20	87-010-197-089		C-CAP, S 0. 01-25 B
C21	87-010-182-089		C-CAP, S 2200P-50 B
C22	87-010-197-089		C-CAP, S 0. 01-25 B
C25	87-010-404-089		CAP, E 4. 7-50 SME
C27	87-010-382-089		CAP, E 22-25 SME
C28	87-010-382-089		CAP, E 22-25 SME
C29	87-010-403-089		CAP, E 3. 3-50 SME
C33	87-010-400-089		CAP, E 0. 47-50 SME
C35	87-010-178-089		C-CAP, S 1000P-50 B
C36	87-010-260-089		CAP, E 47-25 SME
C37	87-010-401-089		CAP, E 1-50 SME
C38	87-010-186-089		C-CAP, S 4700P-50 B
C39	87-010-401-089		CAP, E 1-50 SME
C40	87-010-197-089		C-CAP, S 0. 01-25 B
C42	87-010-318-089		C-CAP, S 47P-50 CH
C43	87-010-318-089		C-CAP, S 47P-50 CH
C44	87-010-314-089		C-CAP, S 22P-50 CH
C45	87-010-315-089		C-CAP, S 27P-50 CH
C51	87-010-197-089		C-CAP, S 0. 01-25 B
C52	87-010-263-089		CAP, E 100-10 SME 5X11
C53	87-010-318-089		C-CAP, S 47P-50 CH
C54	87-010-318-089		C-CAP, S 47P-50 CH
C55	87-010-318-089		C-CAP, S 47P-50 CH
C56	87-010-196-089		C-CAP, S 0. 1-25 F
C57	87-010-197-089		C-CAP, S 0. 01-25 B
C61	87-010-197-089		C-CAP, S 0. 01-25 B
C62	87-010-248-089		CAP, E 220-10 SME
C65	87-010-402-089		CAP, E 2. 2-50 SME
C66	87-010-402-089		CAP, E 2. 2-50 SME
C69	87-010-178-089		C-CAP, S 1000P-50 B
C70	87-010-178-089		C-CAP, S 1000P-50 B
C80	87-010-196-089		C-CAP, S 0. 1-25 F
C81	87-010-221-089		CAP, E 470-10
C82	87-010-197-089		C-CAP, S 0. 01-25 B
C83	87-010-196-089		C-CAP, S 0. 1-25 F
C84	87-010-196-089		C-CAP, S 0. 1-25 F
C85	87-010-196-089		C-CAP, S 0. 1-25 F
C86	87-010-248-089		CAP, E 220-10 SME
C87	87-010-197-089		C-CAP, S 0. 01-25 B
C88	87-010-221-089		CAP, E 470-10
C89	87-010-197-089		C-CAP, S 0. 01-25 B
C90	87-010-404-089		CAP, E 4. 7-50 SME

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
C100	87-010-260-089		CAP, E 47-25 SME
C101	87-010-196-089		C-CAP, S 0. 1-25 F
C104	87-010-197-089		C-CAP, S 0. 01-25 B
C105	87-010-196-089		C-CAP, S 0. 1-25 F
C109	87-010-197-089		C-CAP, S 0. 01-25 B
C112	87-010-384-089		CAP, E 100-25 SME
C113	87-010-322-089		C-CAP, S 100P-50 CH
C114	87-010-322-089		C-CAP, S 100P-50 CH
C115	87-010-318-089		C-CAP, S 47P-50 CH
C116	87-012-156-089		C-CAP, S 220P CH
C121	87-010-196-089		C-CAP, S 0. 1-25 F
C131	87-010-404-089		CAP, E 4. 7-50 SME
C132	87-010-197-089		C-CAP, S 0. 01-25 B
C151	87-010-318-089		C-CAP, S 47P-50 CH
EMI1	87-008-474-089		F-BEAD, EMI BL02RN1
L1	87-003-295-089		COIL, 10UH
L2	87-003-295-089		COIL, 10UH
M2	87-045-305-019		MOTOR, RF-500TB
R28	87-022-359-089		C-RES, S 22K-1/10W J
R29	87-022-359-089		C-RES, S 22K-1/10W J
SFR1	87-024-173-089		SFR, 22K DIA6 V
SFR2	87-024-173-089		SFR, 22K DIA6 V
SFR3	87-024-173-089		SFR, 22K DIA6 V
SFR4	87-024-168-089		SFR, 1K DIA6 V
X1	87-030-270-089		VIB, XTAL 16. 9344 MHZ

UP/DOWN SW C. B

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
SW1	87-036-271-019		SW, LVR 1-2-2 (*)

OPEN SW C. B

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
SW2	87-036-271-019		SW, LVR 1-2-2 (*)

CLOSE SW C. B

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
SW3	87-036-109-019		SW, PUSH SPPB 61

PHOTO C. B

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
PH1	87-026-573-010		P-SNSR, GP1S53V

MOTOR-1 C. B

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
M1	87-045-305-019		MOTOR, RF-500TB

MOTOR-2 C. B

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
M3	9X-262-513-210		SLED MOTOR ASSY
M4	9X-262-513-310		T. T CHASS ASSY W/MOTOR
S4	91-572-085-110		LEAF SW

DECK-1 C. B

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
SOL1	82-ZM1-618-319		SOL ASSY, 27
SW4	87-036-110-019		SW, PUSH SPPB 62
SW5	87-036-110-019		SW, PUSH SPPB 62
SW6	87-036-110-019		SW, PUSH SPPB 62

DECK-2 C. B

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
SFR1	87-024-581-019		SFR, 3. 3K DIA 6H KOA
SOL2	82-ZM1-618-319		SOL ASSY, 27
SW2	87-036-110-019		SW, PUSH SPPB 62
SW3	87-036-110-019		SW, PUSH SPPB 62
SW4	87-036-110-019		SW, PUSH SPPB 62
SW5	87-036-110-019		SW, PUSH SPPB 62
SW6	87-036-110-019		SW, PUSH SPPB 62

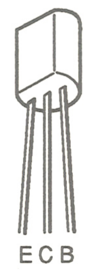
REF. NO	PART NO.	カンリ NO.	DESCRIPTION

RELAY-1 C. B

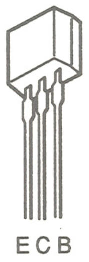
REF. NO	PART NO.	カンリ NO.	DESCRIPTION

RELAY-2 C. B

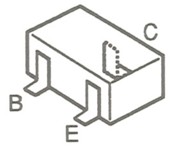
TRANSISTOR ILLUSTRATION



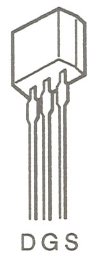
2SA952
2SA1015
2SA1266
2SA1318
2SC1815
2SC1923
2SC2001
2SC3198
2SC3266
2SC3331
2SD655
2SD1302



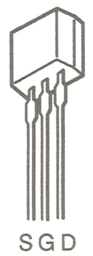
2SA933
2SC1740
DTA114YS
DTA144WS
DTC124ES
DTC143XS
DTC144ES



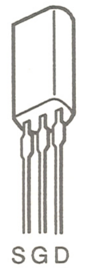
2SC2712
DTA114EK
DTA114TK
DTA124EK
DTA143EK
DTC114YK
DTC144EK
DTC144WK
RN1408



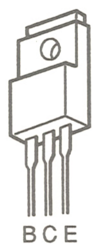
2SK161
2SK241



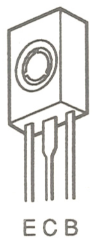
2SK365



2SK246



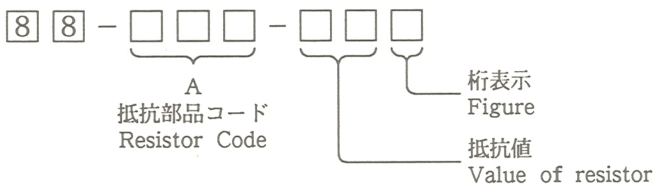
2SB1370



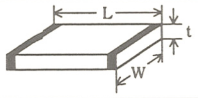
2SB1329

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

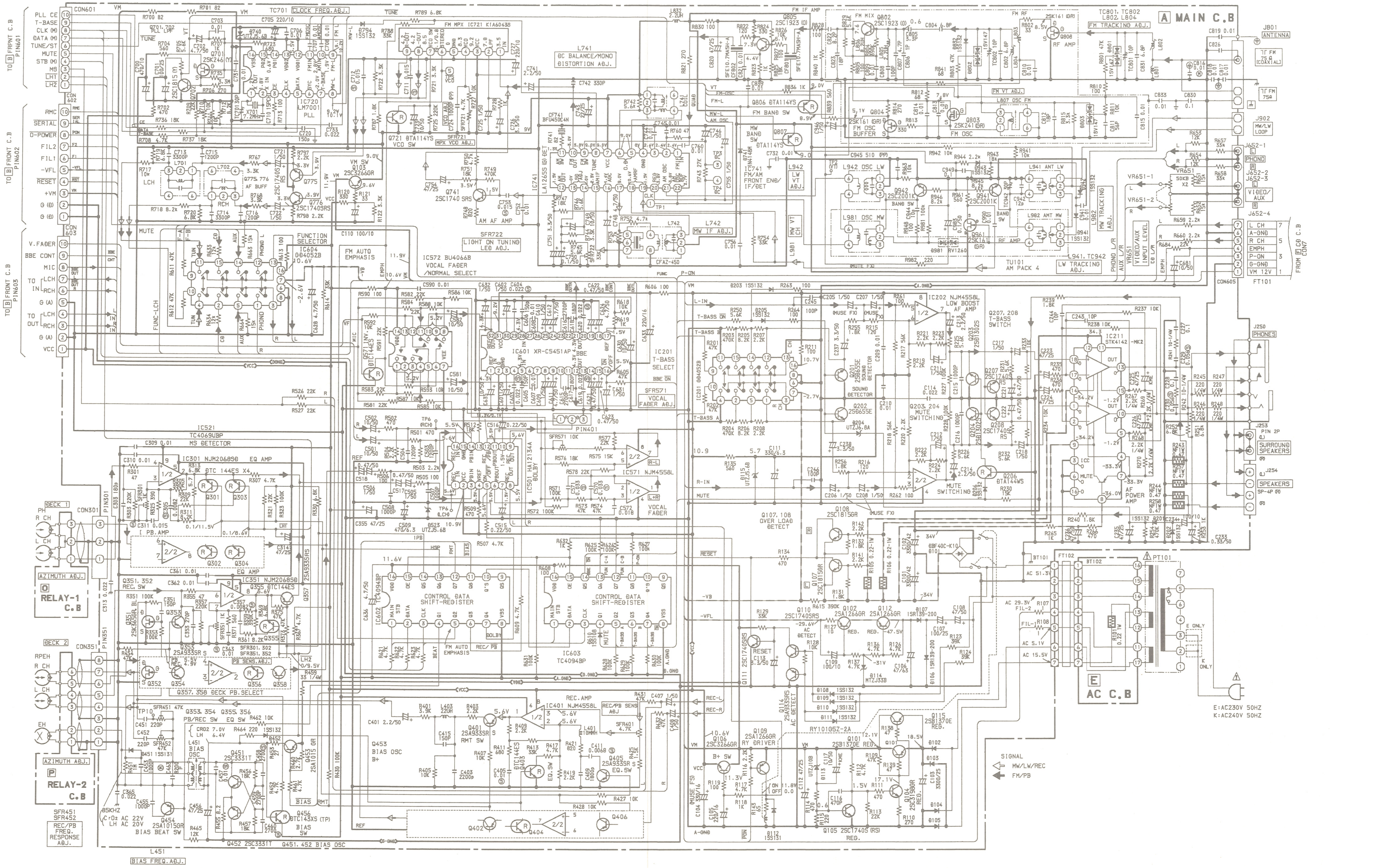
チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding



チップ抵抗
Chip resistor

Wattage 容量	Type 種類	Tolerance 許容誤差	Symbol 記号	Dimensions／寸法 (mm)				Resistor Code : A 抵抗コード : A
				Form/外形	L	W	t	
1/32W	1608	±5%	CJ		1.6	0.8	0.35	108
1/10W	2125	±5%	CJ		2	1.25	1.45	118
1/8W	3126	±5%	CJ		3.2	1.6	0.5 ~0.7	128

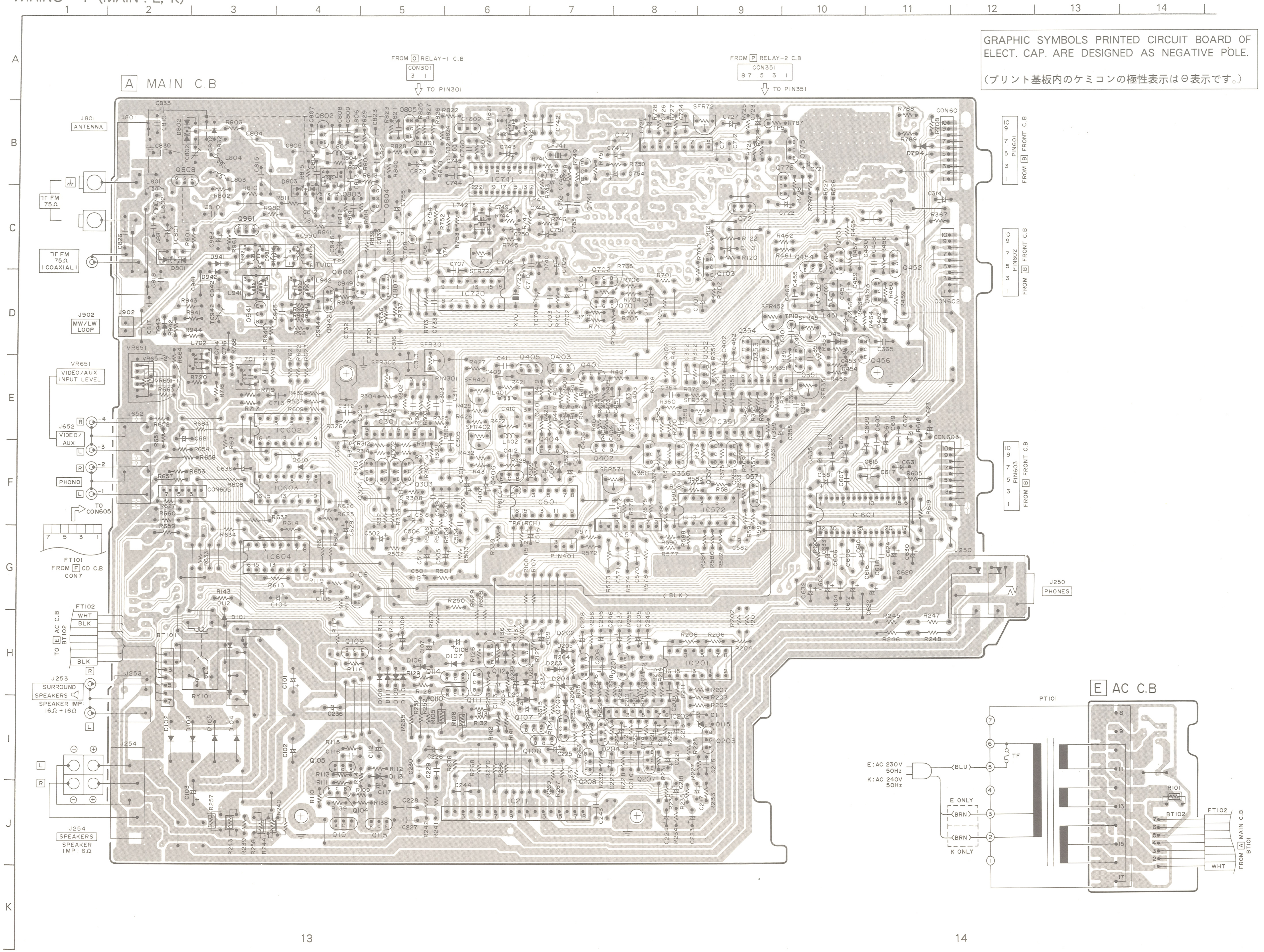
SCHEMATIC DIAGRAM — 1 (MAIN : E, K)


A MAIN C.B
TO B FRONT C.B PIN601
TO B FRONT C.B PIN602
TO B FRONT C.B PIN603
CON601
CON602
CON603
PLL CE
T-BASE
CLK
DATA
TUNE/ST
MUTE
STB
LHT
LHZ
RMC
SERIAL
D-POWER
FIL2
FIL1
-VFL
RESET
+VM
V.FADER
BBE CONT
MIC
TO IN
TO OUT
VCC
TC701 CLOCK FREQ.ADJ.
FM MPX IC721 KIA6043S
IC720 LM7001 PLL
Q721 BTA114YS VCO SW
SFR721 MPX VCO ADJ.
L741 BC BALANCE/MONO DISTORTION ADJ.
CF741 BFU450C4N
IC741 LA1265S
FM/AM FRONT END/IF/DET
L742 MW IF ADJ.
CFAZ-450
Q741 2SC1740 SRS AM AF AMP
SFR722 LIGHT ON TUNING LED ADJ.
Q805 2SC1923 (O)
Q806 BTA114YS FM BAND SW
Q807 BTA114YS MW BAND SW
Q802 2SC1923 (O) FM MIX
Q804 2SK161 (GR) FM OSC BUFFER
Q803 2SK241 (GR) FM OSC
Q808 2SK161 (GR) RF AMP
TC801, TC802 L802, L804 FM TRACKING ADJ.
L807 OSC FM
FM VT ADJ.
L942 OSC LW
L941 ANT LW
L981 OSC MW
L982 ANT MW
Q942 2SC2001K BAND SW
Q941 2SC2001K
Q961 2SK161 RF AMP
MW TRACKING ADJ.
LW TRACKING ADJ.
L941, TC942
TU101 AM PACK 4
JB01 ANTENNA
FM 75Ω (COAXIAL)
J902 MW/LW LOOP
J652-1 PHONO
J652-2
J652-3 VIDEO/AUX
J652-4
VR651-1
VR651-2
PHONO AUX L/R
VIDEO/AUX INPUT LEVEL
FROM C CD C.B CON7
CON605
FT101
L CH
A-GND
R CH
EMPH
P-ON
G-GND
VM 12V
IC604 BU4052B FUNCTION SELECTOR
IC572 BU4066B VOCAL FADER /NORMAL SELECT
FM AUTO EMPHASIS
IC601 XR-C5451AP BBE
Q571 DTC144ES INV.
IC201 T-BASS SELECT
SFR571 VOCAL FADER ADJ.
PIN401
IC571 NJM4558L VOCAL FADER
IC501 HA12134A DOLBY
IC521 TC4069UBP MS DETECTOR
IC301 NJM2068SD EQ AMP
IC351 NJM2068SD EQ AMP
Q301 DTC144ES X4
PB.AMP
Q351, 352 REC. SW
DECK 1
DECK 2
CON301
PIN301
CON351
PIN351
AZIMUTH ADJ.
D RELAY-1 C.B
P RELAY-2 C.B
SFR301, 302 SFR351, 352 PB SENS.ADJ.
Q357, 358 DECK PB.SELECT
IC602 TC4094BP CONTROL DATA SHIFT-REGISTER
IC603 TC4094BP CONTROL DATA SHIFT-REGISTER
IC401 NJM4558L REC.AMP
REC/PB SENS ADJ
Q401 2SA933SR RMT SW
Q453 BIAS OSC
Q451, 452 BIAS OSC
Q452 2SC3331T
Q454 2SA1015GR BIAS BEAT SW
Q456 DTC143XS (TP) BIAS SW
Q405 2SA933SR S EQ.SW
Q353, 354 Q355, 356 PB/REC SW EQ SW
SFR451 SFR452 REC/PB FREQ. RESPONSE ADJ.
L451 BIAS FREQ.ADJ.
IC202 NJM4558L LOW BOOST AF AMP
Q207, 208 T-BASS SWITCH
Q201 2SB655E SOUND DETECTOR
Q202 2SB655E
Q203, 204 MUTE SWITCHING
Q206 BTA144WS
MUTE SWITCHING
IC211 STK4142-MK2
AF POWER AMP
J250 PHONES
J253 PIN 2P SURROUND SPEAKERS
J254 SPEAKERS SP-4P
Q107, 108 OVER LOAD DETECT
Q108 2SC1815GR
Q107 2SC1815GR
Q110 2SC1740SRS
Q102 2SA1266GR
Q112 2SA1266GR
AC DETECT
Q111 2SC1740SRS RESET
Q114 2SA933SRS AC DETECT
Q109 2SA1266GR RY DRIVER
RY101G5Z-2A
Q106 2SC3266GR B+ SW
Q101 2SB1370E REG.
Q104 2SC3198GR
Q105 2SC1740S (RS) REG.
Q115 2SB1370E REG.
BT101
FT102
BT102
PT101
E AC C.B
E ONLY
K ONLY
E:AC230V 50HZ
K:AC240V 50HZ
SIGNAL
MW/LW/REC
FM/PB

WIRING – 1 (MAIN : E, K)

GRAPHIC SYMBOLS PRINTED CIRCUIT BOARD OF ELECT. CAP. ARE DESIGNED AS NEGATIVE POLE.

（プリント基板内のケミコンの極性表示は⊖表示です。）



1
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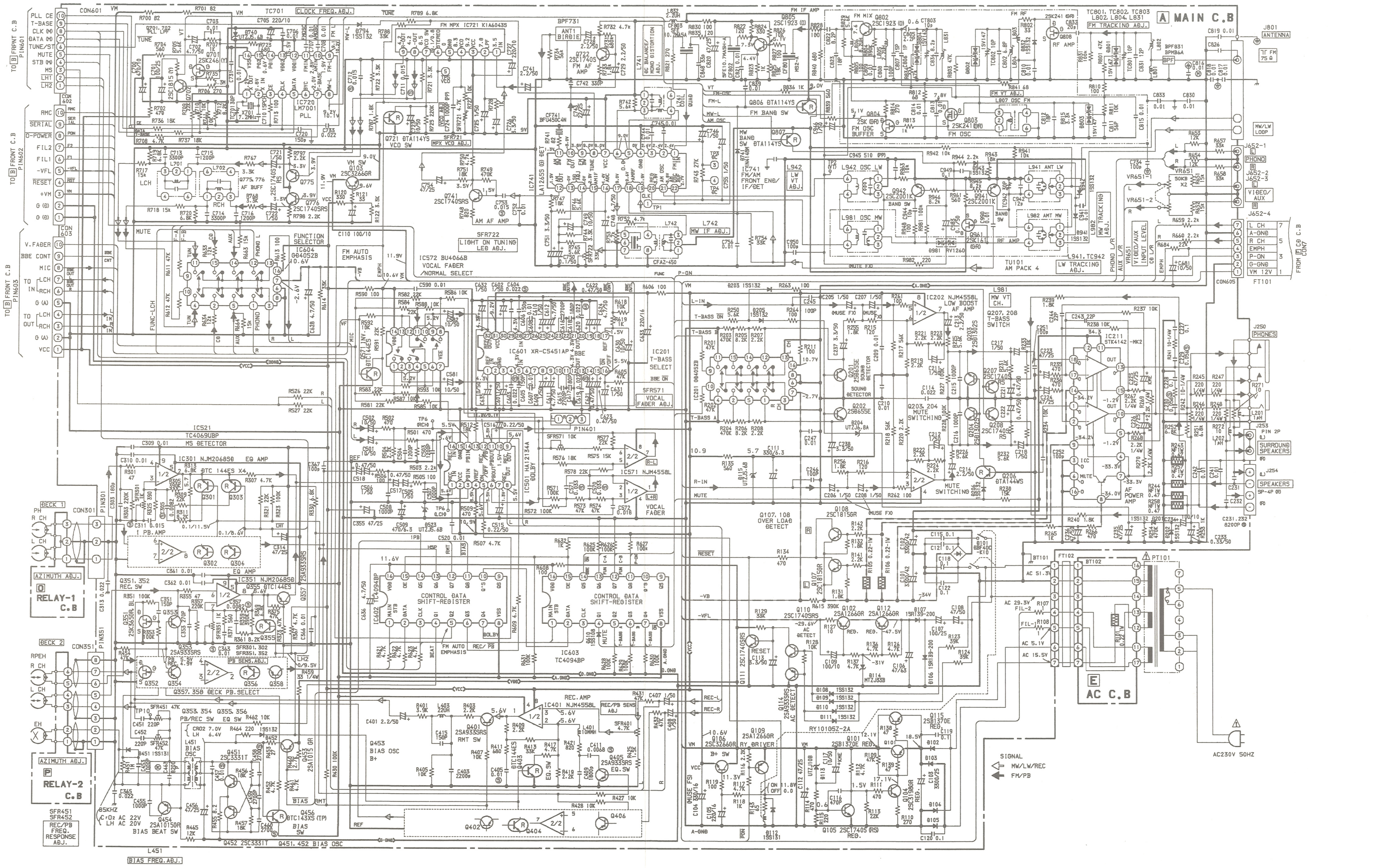
12
13
14
A
B
C
D
E
F
G
H
I
J
K
A MAIN C.B
FROM O RELAY-1 C.B
CON301
3 1
TO PIN301
FROM P RELAY-2 C.B
CON351
8 7 5 3 1
TO PIN351
J801
ANTENNA
FM 75Ω
FM 75Ω (COAXIAL)
J902
MW/LW LOOP
VR651
VIDEO/AUX INPUT LEVEL
J652
VIDEO/AUX
R
L
PHONO
TO CON605
FT101
FROM F CD C.B
CON7
FT102
WHT
BLK
TO E AC C.B BT102
J253
SURROUND SPEAKERS
SPEAKER IMP. 16Ω + 16Ω
J254
SPEAKERS
SPEAKER IMP : 6Ω
RY101
IC201
IC211
IC301
IC351
IC501
IC571
IC572
IC601
IC602
IC603
IC604
IC720
IC721
CON601
CON602
CON603
CON605
PIN601
PIN602
PIN603
FROM B FRONT C.B
J250
PHONES
(BLK)
E AC C.B
PT101
TF
E:AC 230V 50Hz
K:AC 240V 50Hz
(BLU)
E ONLY
(BRN)
K ONLY
R101
BT102
FT102
FROM A MAIN C.B BT101
WHT
13
14

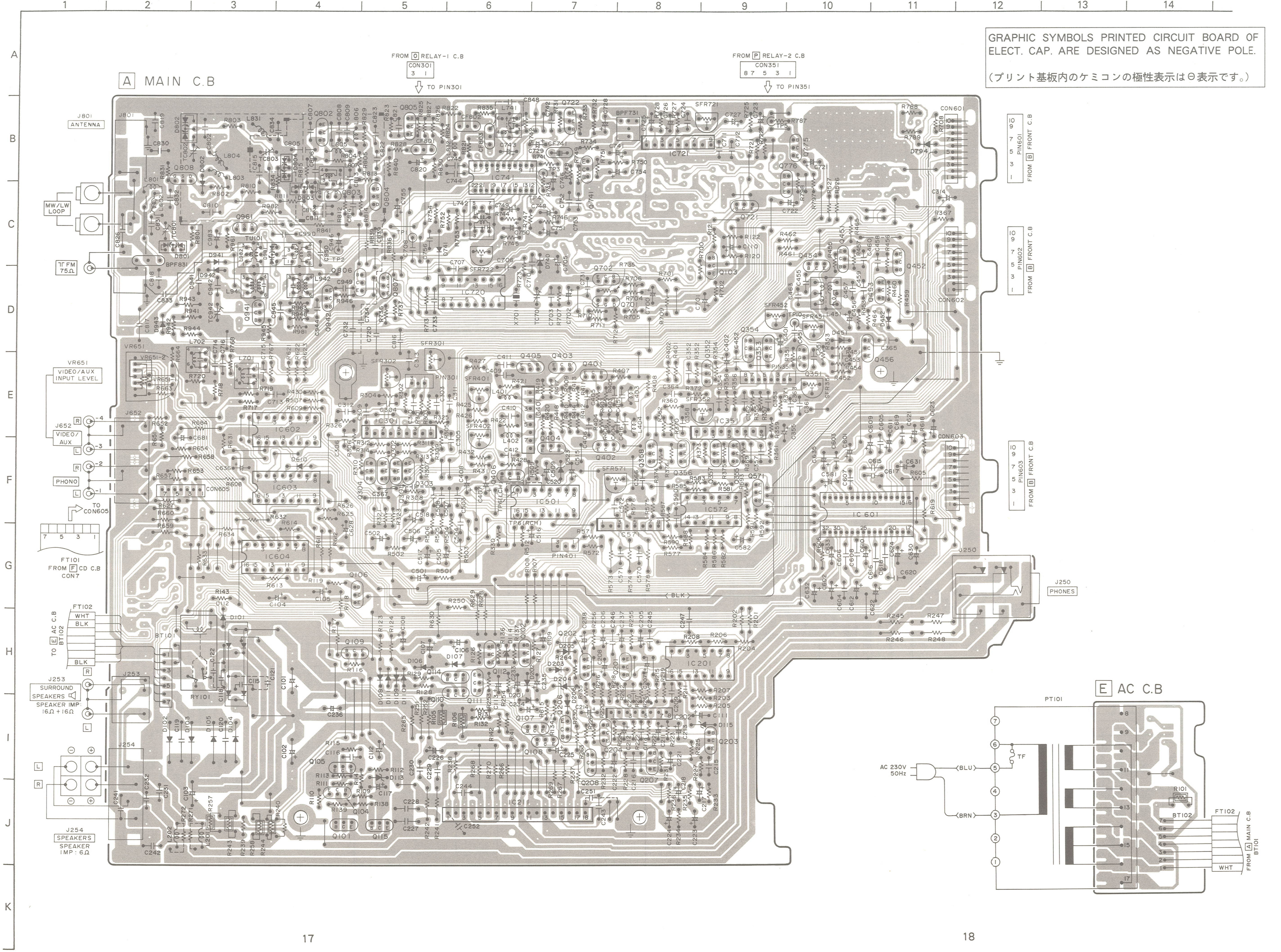
SCHEMATIC DIAGRAM – 2 (MAIN : Z)


A MAIN C.B
CON601
TO B FRONT C.B PIN601
CON602
TO B FRONT C.B PIN602
CON603
TO B FRONT C.B PIN603
PLL CE
T-BASE
CLK
DATA
TUNE/ST
MUTE
STB
MS
LH1
LH2
RMC
SERIAL
O-POWER
FIL2
FIL1
-VFL
RESET
+VM
V.FADER
BBE CONT
MIC
TO IN
TO OUT
VCC
CLOCK FREQ.ADJ.
IC720 LM7001 PLL
FM MPX IC721 K1A6043S
MPX VCO ADJ.
Q721 DTA114YS VCO SW
Q741 2SC1740SRS AM AF AMP
SFR722 LIGHT ON TUNING LED ADJ.
BPF731
Q722 2SC1740S FM AF AMP
IC741 LA1265S (D) DET
T741 FM/AM FRONT END/ IF/DET
L742 MW IF ADJ.
CF741 BFU450C4N
CFAZ-450
RF BALANCE/ MONO DISTORTION ADJ.
Q805 2SC1923 (O)
Q806 DTA114YS FM BAND SW
Q807 MW BAND SW DTA114YS
Q802 2SC1923 (O) FM MIX
Q808 2SK241 RF AMP
Q804 2SK (GR) FM OSC BUFFER
Q803 2SK241 (GR) FM OSC
L807 OSC FM
FM VT ADJ.
FM TRACKING ADJ.
TC801, TC802, TC803 L802, L804, L851
BPF831 BPM96A
J801 ANTENNA
FM 75Ω
MW/LW LOOP
L942 LW VT ADJ.
L942 OSC LW
L941 ANT LW
L981 OSC MW
L982 ANT MW
Q942 2SC2001K BAND SW
Q941 2SC2001K RF AMP
Q981 RV1260
TU101 AM PACK 4
L941, TC942 LW TRACKING ADJ.
L982 MW TRACKING ADJ.
J652-1 PHONO
J652-2
J652-3 VIDEO/AUX
J652-4
VR651 50KB X2
CON605 FT101
FROM F CD C.B CON7
L CH
A-GND
R CH
EMPH
P-ON
G-GND
VM 12V
IC604 BU4052B FUNCTION SELECTOR
FUNC-LCH
IC572 BU4066B VOCAL FADER /NORMAL SELECT
FM AUTO EMPHASIS
Q571 INV. DTC144ES
IC601 XR-C5451AP BBE
SFR571 VOCAL FADER ADJ.
IC201 T-BASS SELECT
IC571 NJM4558L VOCAL FADER
IC501 HA12134A DOLBY
IC521 TC4069UBP MS DETECTOR
IC301 NJM2068SD EQ AMP
Q301 Q302 Q303 Q304
IC351 NJM2068SD EQ AMP
Q351, 352 REC. SW
Q353 Q354 Q355 Q356
Q357, 358 DECK PB. SELECT
IC602 TC4094BP CONTROL DATA SHIFT-REGISTER
IC603 TC4094BP CONTROL DATA SHIFT-REGISTER
FM AUTO EMPHASIS
REC/PB
BOLBY
IC401 NJM4558L REC. AMP
REC/PB SENS ADJ
Q401 2SA933SRS RMT SW
Q405 2SA933SRS EQ.SW
Q403 DTC144ES
Q453 BIAS OSC
Q451 2SC3331T BIAS OSC
Q454 2SA1015GR BIAS BEAT SW
Q456 DTC143XS (TP) BIAS SW
Q452 2SC3331T Q451, 452 BIAS OSC
L451 BIAS FREQ.ADJ.
DECK 1
CON301
PIN301
D AZIMUTH ADJ.
RELAY-1 C.B
DECK 2
CON351
PIN351
P AZIMUTH ADJ.
RELAY-2 C.B
SFR451 SFR452 REC/PB FREQ. RESPONSE ADJ.
85KHZ CrO2 AC 22V LH AC 20V
IC202 NJM4558L LOW BOOST AF AMP
Q207, 208 T-BASS SWITCH
Q201 2SB655E SOUND DETECTOR
Q202 2SB655E
Q203, 204 MUTE SWITCHING
Q206 DTA144WS MUTE SWITCHING
L981 MW VT CH.
IC211 STK4142-MK2 AF POWER AMP
J250 PHONES
J253 SURROUND SPEAKERS
J254 SPEAKERS
Q107, 108 OVER LOAD DETECT
Q108 2SC1815GR
Q107 2SC1815GR
Q110 2SC1740SRS AC DETECT
Q102 2SA1266GR
Q112 2SA1266GR
Q111 2SC1740SRS RESET
Q114 2SA933SRS AC DETECT
Q109 2SA1266GR RY DRIVER
Q106 2SC3266GR B+ SW
RY101 05Z-2A
Q101 2SB1370E REG.
Q115 2SB1370E REG.
Q104 2SC3198GR REG.
Q105 2SC1740S (RS) REG.
D101 RBV-402 D102 D103 D104 D105
E AC C.B
BT101 FT102 BT102 PT101
AC 51.3V
AC 29.3V FIL-2
FIL-1
AC 5.1V
AC 15.5V
AC230V 50HZ
SIGNAL
MW/LW/REC
FM/PB

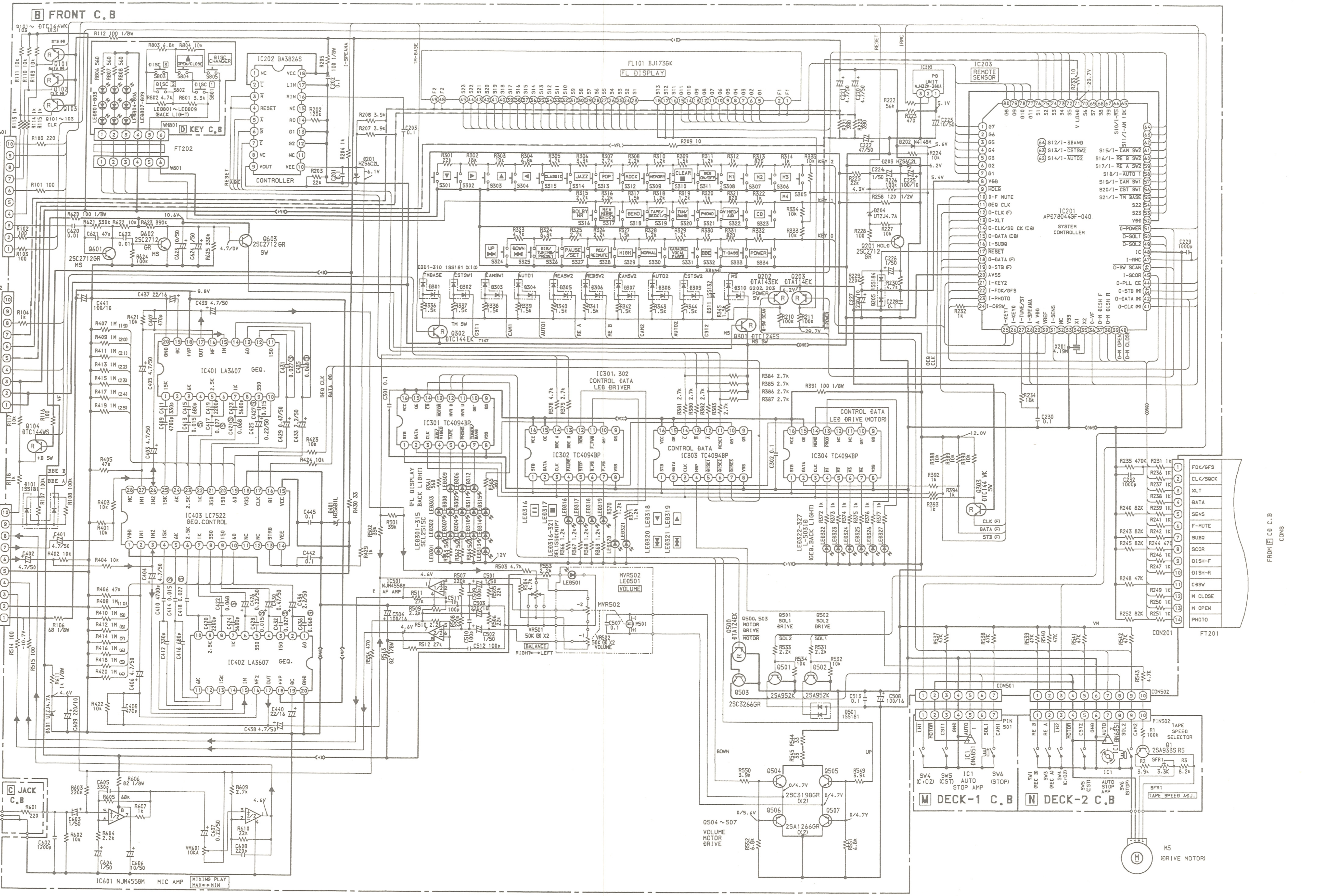
WIRING – 2 (MAIN : Z)

GRAPHIC SYMBOLS PRINTED CIRCUIT BOARD OF ELECT. CAP. ARE DESIGNED AS NEGATIVE POLE.

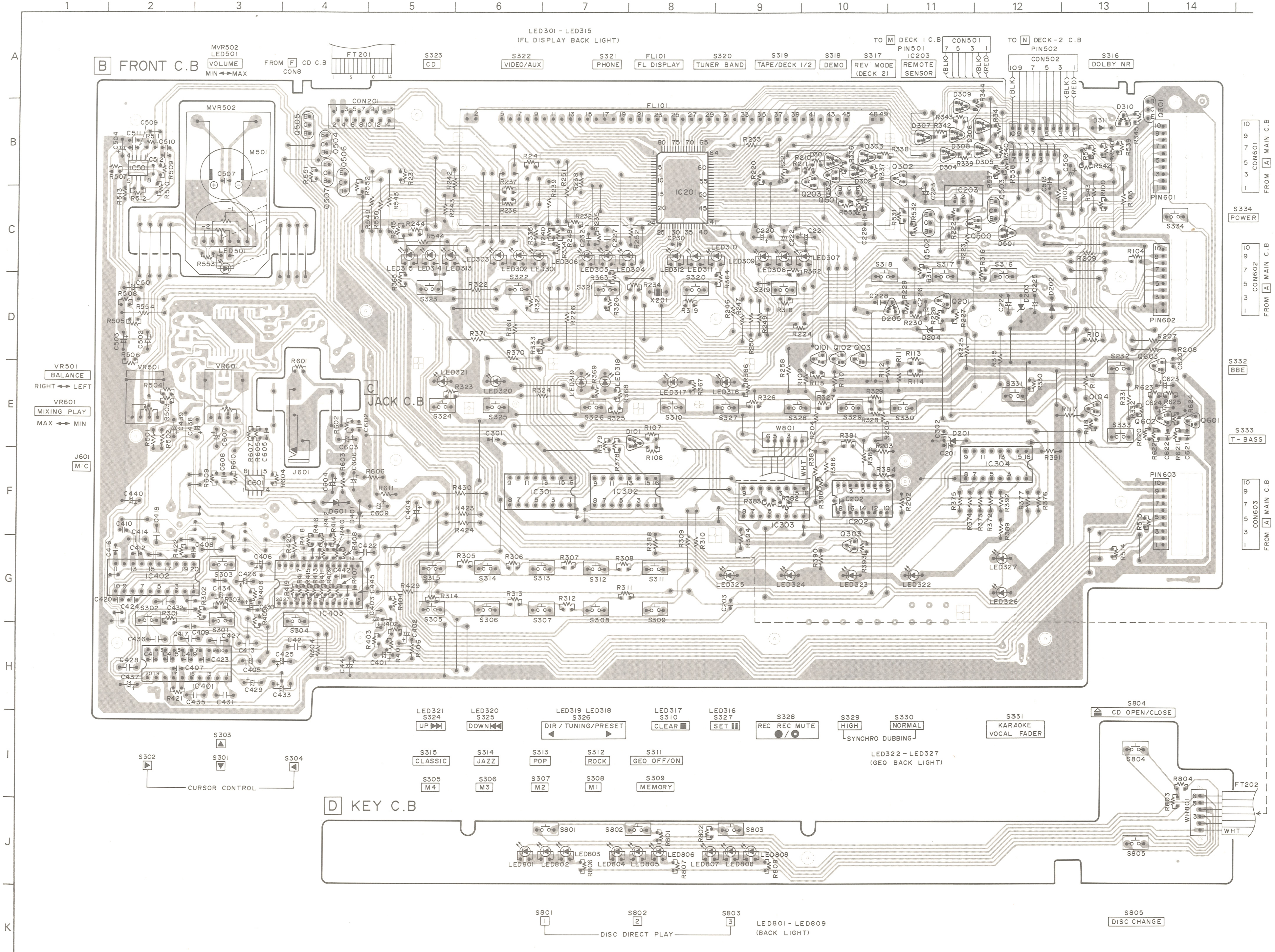
（プリント基板内のケミコンの極性表示は⊖表示です。）


1 2 3 4 5 6 7 8 9 10 11 12 13 14
A B C D E F G H I J K
A MAIN C.B
FROM O RELAY-1 C.B
CON301
3 1
TO PIN301
FROM P RELAY-2 C.B
CON351
8 7 5 3 1
TO PIN351
J801 ANTENNA
MW/LW LOOP
FM 75Ω
VR651 VIDEO/AUX INPUT LEVEL
J652 VIDEO/AUX
PHONO
TO CON605
FT101 FROM F CD C.B CON7
7 5 3 1
FT102
WHT
BLK
TO E AC C.B BT102
J253 SURROUND SPEAKERS
SPEAKER IMP: 16Ω + 16Ω
J254 SPEAKERS
SPEAKER IMP: 6Ω
FROM B FRONT C.B PIN601
FROM B FRONT C.B PIN602
FROM B FRONT C.B PIN603
CON601
CON602
CON603
J250 PHONES
IC720
IC721
IC301
IC351
IC501
IC571
IC572
IC601
IC602
IC603
IC604
IC201
IC202
IC211
RY101
BLK
E AC C.B
PT101
TF
AC 230V 50Hz
BLU
BRN
R101
BT102
FT102
FROM A MAIN C.B BT101
WHT

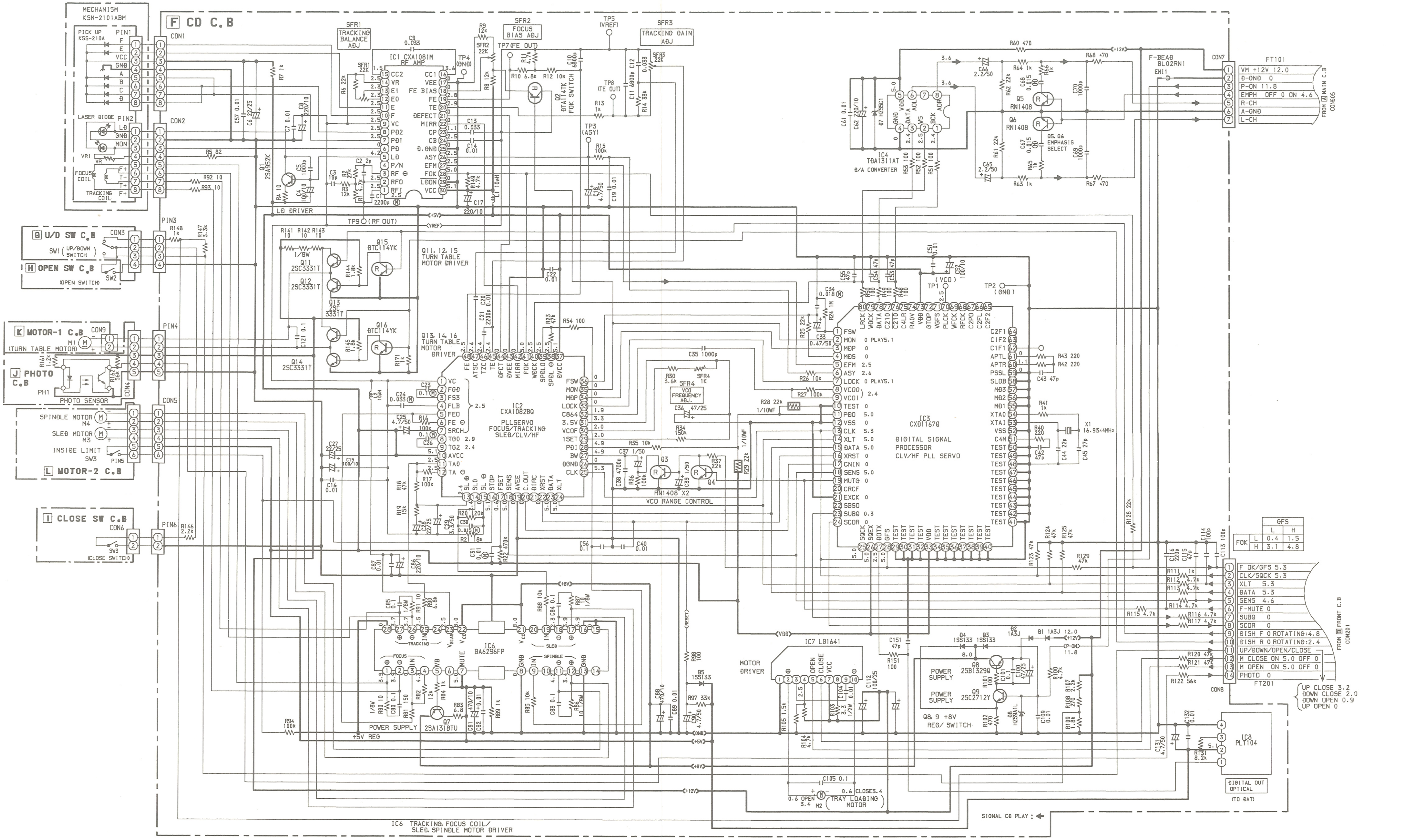
SCHEMATIC DIAGRAM – 3 (FRONT)


B FRONT C.B
D KEY C.B
C JACK C.B
M DECK-1 C.B
N DECK-2 C.B
IC202 BA3826S
CONTROLLER
FL101 BJ1736K
FL DISPLAY
IC203
REMOTE SENSOR
IC201
μPD78044GF-040
SYSTEM CONTROLLER
IC401 LA3607 GEQ.
IC402 LA3607 GEQ.
IC403 LC7522
GEQ.CONTROL
IC301 TC4094BP
IC302 TC4094BP
IC303 TC4094BP
IC304 TC4094BP
IC301, 302
CONTROL DATA
LED DRIVER
CONTROL DATA
CONTROL DATA
LED DRIVE (MOTOR)
IC501 NJM4558M
AF AMP
IC601 NJM4558M
MIC AMP
MIXING PLAY
MAX↔MIN
VR501
50K (B) X2
BALANCE
RIGHT↔LEFT
VR502
50K (B) X2
VOLUME
MVR502
LED501
VOLUME
Q500, 503
MOTOR DRIVE
Q501
SOL1 DRIVE
Q502
SOL2 DRIVE
Q504～507
VOLUME
MOTOR
DRIVE
2SC3198GR (X2)
2SA1266GR (X2)
M5
(DRIVE MOTOR)
TAPE SPEED SELECTOR
TAPE SPEED ADJ.
SFR1
SW4 (C-02)
SW5 (CST)
IC1 AUTO STOP AMP
SW6 (STOP)
CON501
CON502
CON201
FT201
FT202
W801
WH801
PIN601
PIN602
PIN603
TO A MAIN C.B CON601
TO A MAIN C.B CON602
TO A MAIN C.B CON603
FROM F CD C.B CON8
J601
MIC
FL DISPLAY BACK LIGHT
LED301～315
SEL2515C
LED322～327
SEL2515C
LED801～LED809 (BACK LIGHT)

WIRING – 3 (FRONT)

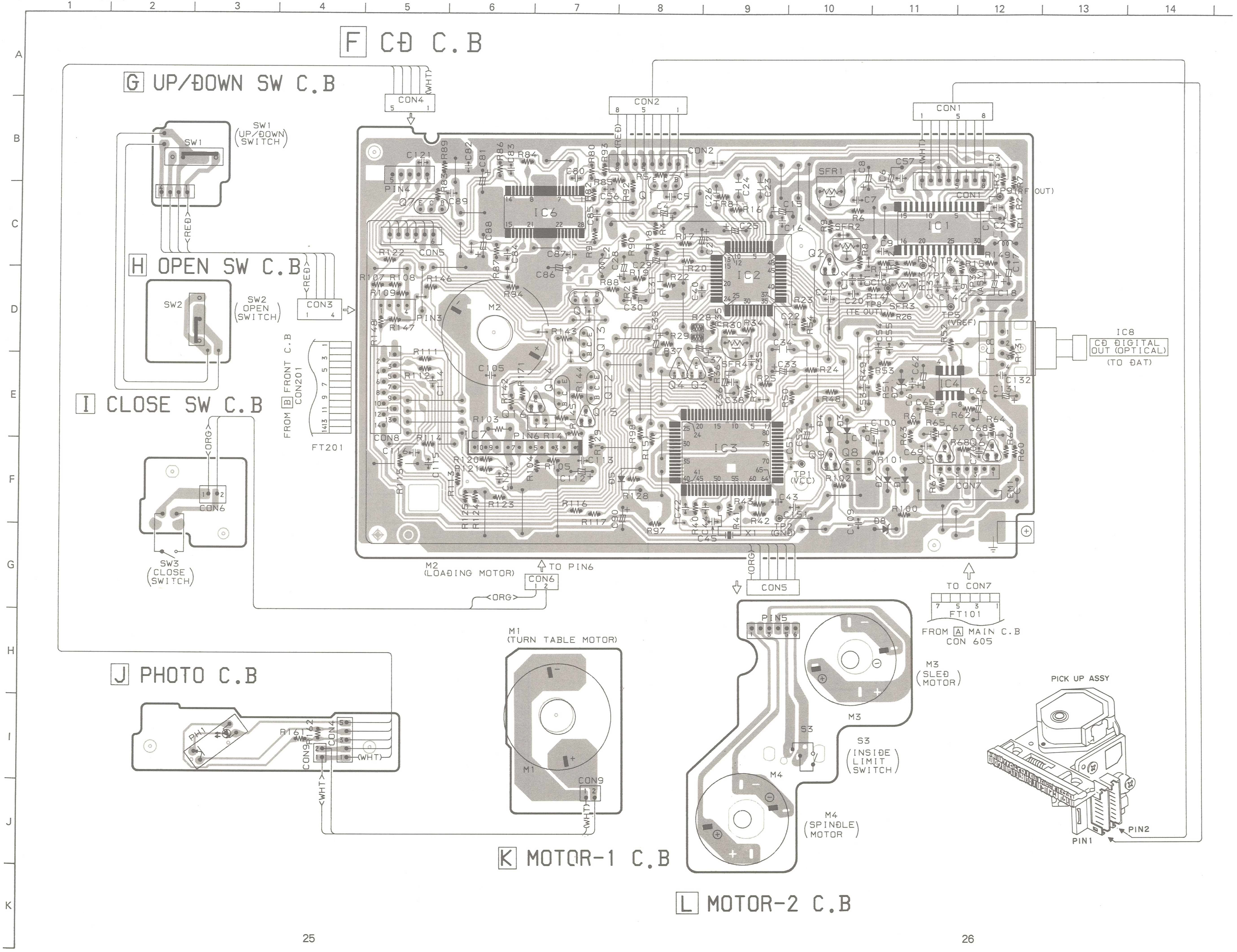

B FRONT C.B
C JACK C.B
D KEY C.B
MVR502 LED501 VOLUME MIN ◄► MAX
FROM F CD C.B CON8
FT201
S323 CD
LED301 – LED315 (FL DISPLAY BACK LIGHT)
S322 VIDEO/AUX
S321 PHONE
FL101 FL DISPLAY
S320 TUNER BAND
S319 TAPE/DECK 1/2
S318 DEMO
S317 REV MODE (DECK 2)
IC203 REMOTE SENSOR
TO M DECK 1 C.B PIN501
CON501
TO N DECK-2 C.B PIN502
CON502
S316 DOLBY NR
S334 POWER
CON601 FROM A MAIN C.B
CON602 FROM A MAIN C.B
CON603 FROM A MAIN C.B
S332 BBE
S333 T-BASS
VR501 BALANCE RIGHT ◄► LEFT
VR601 MIXING PLAY MAX ◄► MIN
J601 MIC
IC201
IC203
IC301
IC302
IC303
IC202
IC304
IC401
IC402
IC403
IC501
IC601
W801
PIN601
PIN602
PIN603
LED321 S324 UP ▶▶|
LED320 S325 DOWN |◀◀
LED319 LED318 S326 DIR / TUNING/PRESET ◀ ▶
LED317 S310 CLEAR ■
LED316 S327 SET II
S328 REC REC MUTE ●/⊙
S329 HIGH
S330 NORMAL
SYNCHRO DUBBING
S331 KARAOKE VOCAL FADER
LED322 – LED327 (GEQ BACK LIGHT)
S804 ⏏ CD OPEN/CLOSE
S303 ▲
S302 ▶
S301 ▼
S304 ◀
CURSOR CONTROL
S315 CLASSIC
S314 JAZZ
S313 POP
S312 ROCK
S311 GEQ OFF/ON
S305 M4
S306 M3
S307 M2
S308 M1
S309 MEMORY
FT202
WH801
WHT
S801 1
S802 2
S803 3
DISC DIRECT PLAY
LED801 – LED809 (BACK LIGHT)
S805 DISC CHANGE

SCHEMATIC DIAGRAM – 4 (CD)

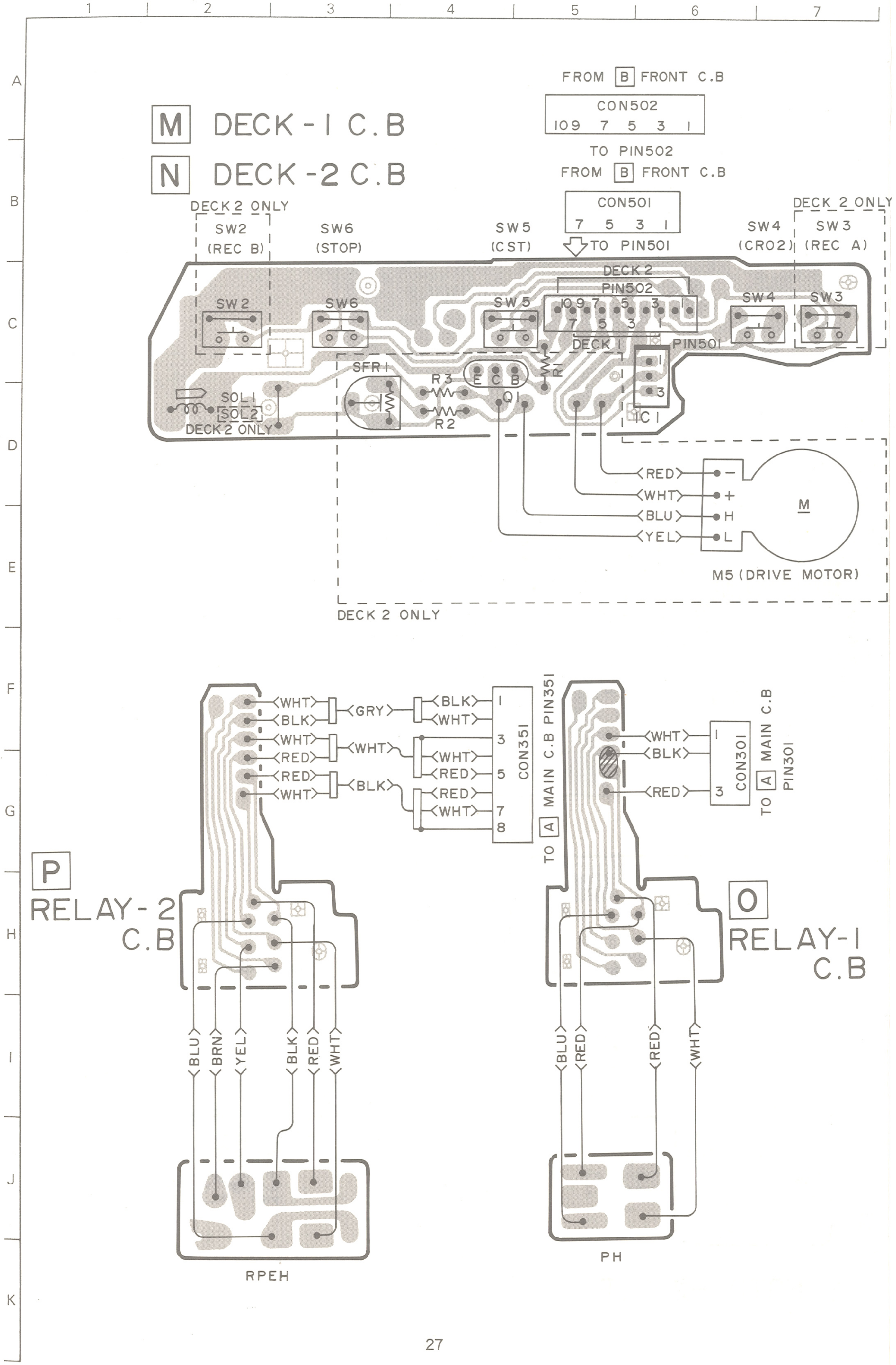


F CD C.B
MECHANISM KSM-2101ABM
PICK UP KSS-210A
LASER DIODE
FOCUS COIL
TRACKING COIL
CON1
CON2
PIN1
PIN2
PIN3
PIN4
PIN5
PIN6
G U/D SW C.B
SW1 (UP/DOWN SWITCH)
H OPEN SW C.B
SW2 (OPEN SWITCH)
K MOTOR-1 C.B
M1 (TURN TABLE MOTOR)
J PHOTO C.B
PH1 PHOTO SENSOR
SPINDLE MOTOR M4
SLED MOTOR M3
INSIDE LIMIT SW3
L MOTOR-2 C.B
I CLOSE SW C.B
SW3 (CLOSE SWITCH)
SFR1 TRACKING BALANCE ADJ
IC1 CXA1081M RF AMP
SFR2 FOCUS BIAS ADJ
TP7 (FE OUT)
TP5 (VREF)
SFR3 TRACKING GAIN ADJ
TP8 (TE OUT)
TP3 (ASY)
Q2 DTA114TK FOK SWITCH
Q1 2SA952K
LD DRIVER
TP9 (RF OUT)
Q11, 12, 15 TURN TABLE MOTOR DRIVER
Q13, 14, 16 TURN TABLE MOTOR DRIVER
Q15 DTC114YK
Q16 DTC114YK
Q11 2SC3331T
Q12 2SC3331T
Q13 2SC3331T
Q14 2SC3331T
IC2 CXA1082BQ PLL SERVO FOCUS/TRACKING SLED/CLV/HF
SFR4 VCO FREQUENCY ADJ.
RN1408 X2 VCO RANGE CONTROL
IC3 CXD1167Q DIGITAL SIGNAL PROCESSOR CLV/HF PLL SERVO
X1 16.934MHz
TP1 (VCO)
TP2 (GND)
IC4 TDA1311AT D/A CONVERTER
Q5 RN1408
Q6 RN1408
Q5, Q6 EMPHASIS SELECT
F-BEAD BL02RN1
EM11
CON7
FT101
VM +12V 12.0
D-GND 0
P-ON 11.8
EMPH OFF 0 ON 4.6
R-CH
A-GND
L-CH
FROM A MAIN C.B CON605
IC6 BA6296FP
FOCUS
TRACKING
SLED
SPINDLE
POWER SUPPLY
+5V REG
Q7 2SA1318TU
IC6 TRACKING, FOCUS COIL/ SLED, SPINDLE MOTOR DRIVER
IC7 LB1641 MOTOR DRIVER
M2 (TRAY LOADING MOTOR)
0.6 OPEN 3.4
0.6 CLOSE 3.4
Q8 2SB1329Q POWER SUPPLY
Q9 2SC2712Y POWER SUPPLY
Q8, 9 +8V REG/ SWITCH
IC8 PLT104
DIGITAL OUT OPTICAL (TO DAT)
SIGNAL CD PLAY
CON8
FT201
F OK/GFS 5.3
CLK/SQCK 5.3
XLT 5.3
DATA 5.3
SENS 4.6
F-MUTE 0
SUBQ 0
SCOR 0
DISH F 0 ROTATING:4.8
DISH R 0 ROTATING:2.4
UP/DOWN/OPEN/CLOSE
M CLOSE ON 5.0 OFF 0
M OPEN ON 5.0 OFF 0
PHOTO 0
UP CLOSE 3.2
DOWN CLOSE 2.0
DOWN OPEN 0.9
UP OPEN 0
FROM B FRONT C.B CON201

	GFS	
	L	H
FOK L	0.4	1.5
FOK H	3.1	4.8

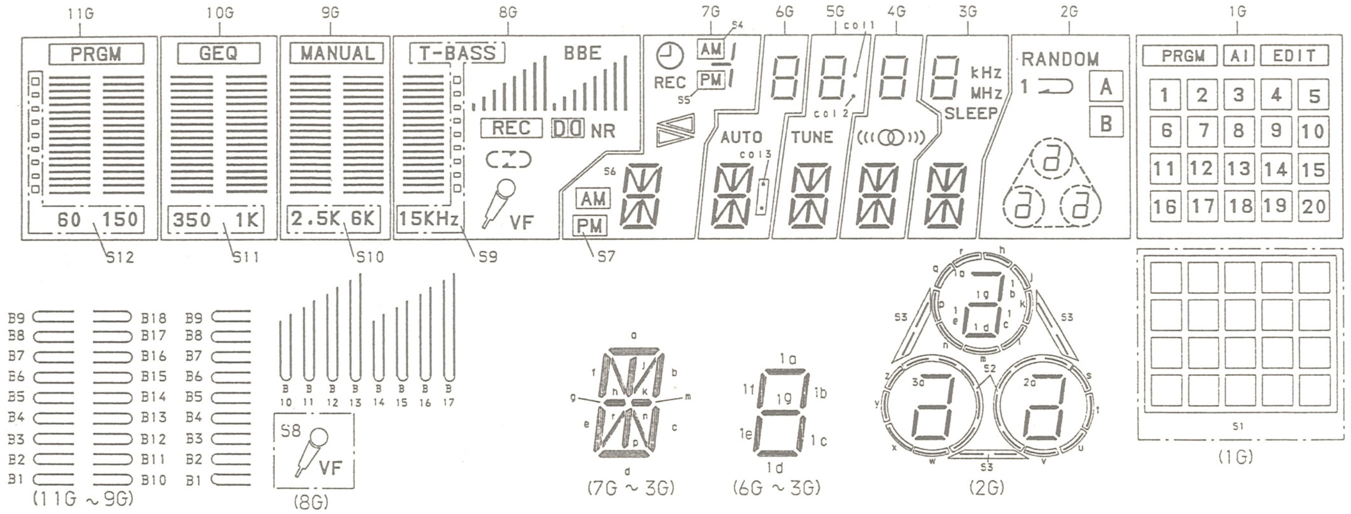

1
2
3
4
5
6
7
8
9
10
11
12
13
14
A
B
C
D
E
F
G
H
I
J
K
F CD C.B
G UP/DOWN SW C.B
SW1 (UP/DOWN SWITCH)
(WHT)
CON4
5 1
CON2
8 5 1
(RED)
CON1
1 5 8
(WHT)
TP9 (RF OUT)
IC6
IC1
IC2
IC3
IC4
IC7
Q2
Q7
(RED)
H OPEN SW C.B
SW2 (OPEN SWITCH)
(RED)
CON3
1 4
CON5
PIN3
PIN4
M2
C105
FROM B FRONT C.B CON201
FT201
I CLOSE SW C.B
(ORG)
CON6
SW3 (CLOSE SWITCH)
CON8
PIN6
TP1 (VCC)
TP2 (GND)
TP8 (TE OUT)
TP5 (VREF)
TP4
TP7
TP3 (ASY)
SFR1
SFR2
SFR3
SFR4
X1
CON7
EM1
IC8
IC8 CD DIGITAL OUT (OPTICAL) (TO DAT)
M2 (LOADING MOTOR)
TO PIN6
CON6
1 2
(ORG)
(ORG)
CON5
TO CON7
7 5 3 1
FT101
FROM A MAIN C.B CON 605
PIN5
M3 (SLED MOTOR)
M3
S3
S3 (INSIDE LIMIT SWITCH)
M4
M4 (SPINDLE MOTOR)
PICK UP ASSY
PIN1
PIN2
M1 (TURN TABLE MOTOR)
M1
CON9
(WHT)
J PHOTO C.B
PH1
R161
R162
CON4
CON9
(WHT)
(WHT)
K MOTOR-1 C.B
L MOTOR-2 C.B

WIRING – 5 (DECK)


1
2
3
4
5
6
7
A
B
C
D
E
F
G
H
I
J
K
M DECK-1 C.B
N DECK-2 C.B
FROM B FRONT C.B
CON502
10 9 7 5 3 1
TO PIN502
FROM B FRONT C.B
CON501
7 5 3 1
TO PIN501
DECK 2 ONLY
SW2 (REC B)
SW6 (STOP)
SW5 (CST)
SW4 (CRO2)
DECK 2 ONLY
SW3 (REC A)
DECK 2
PIN502
SW2
SW6
SW5
SW4
SW3
DECK 1
PIN501
SFR1
R3
R2
R1
E C B
Q1
IC1
SOL1
SOL2
DECK 2 ONLY
RED
WHT
BLU
YEL
M
M5 (DRIVE MOTOR)
DECK 2 ONLY
WHT
BLK
WHT
RED
RED
WHT
GRY
WHT
BLK
BLK
WHT
WHT
RED
RED
WHT
CON351
TO A MAIN C.B PIN351
P RELAY-2 C.B
BLU
BRN
YEL
BLK
RED
WHT
RPEH
WHT
BLK
RED
CON301
TO A MAIN C.B PIN301
O RELAY-1 C.B
BLU
RED
RED
WHT
PH

FL (BJ173GK) GRID ASSIGNMENT/ANODE CONNECTION

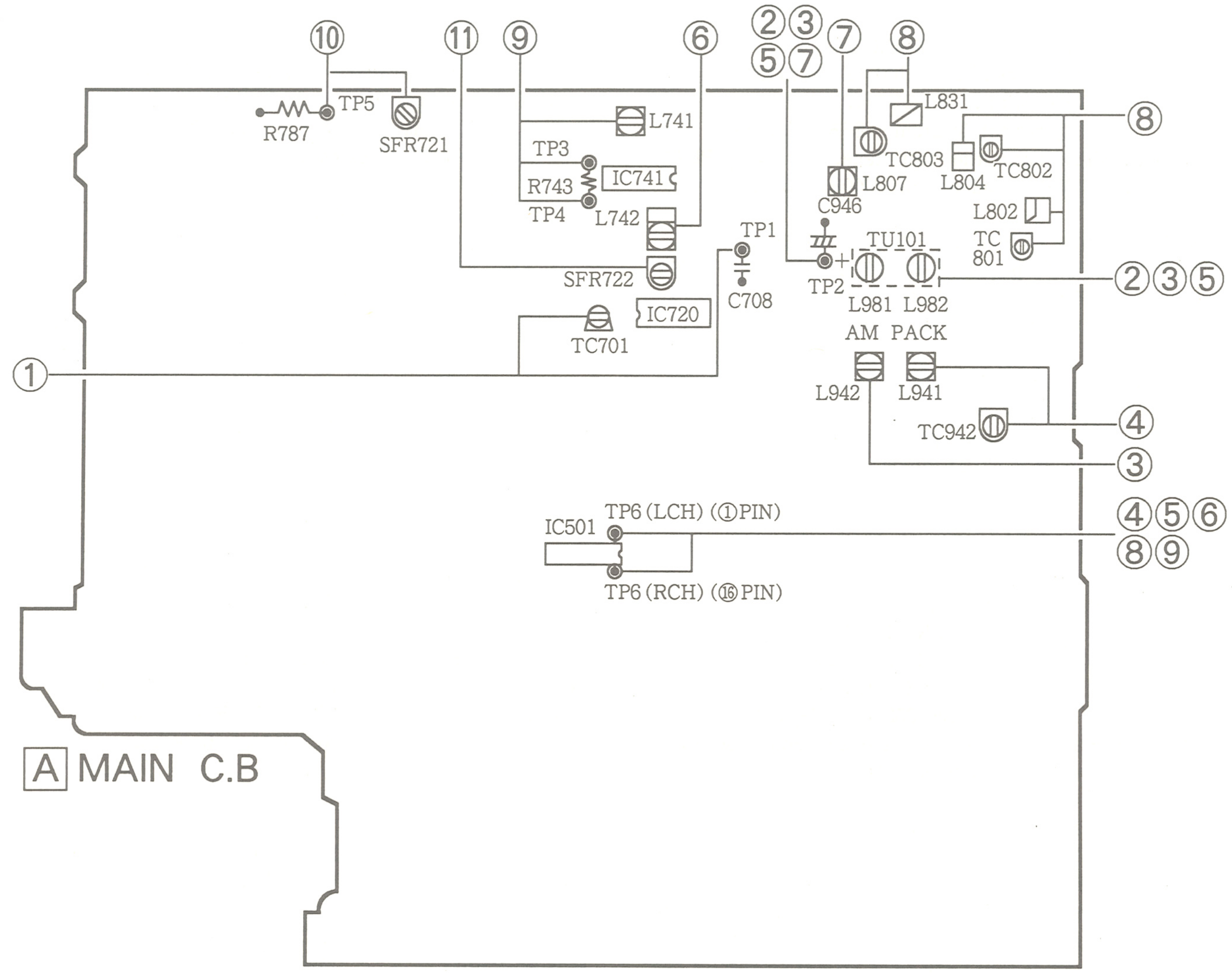
GRID ASSIGNMENT


11G
10G
9G
8G
7G
6G
5G
4G
3G
2G
1G
PRGM
GEQ
MANUAL
T-BASS
BBE
REC
DD NR
AM
PM
REC
AUTO
TUNE
kHz
MHz
SLEEP
RANDOM
A
B
PRGM
AI
EDIT
60
150
350
1K
2.5K
6K
15KHz
VF
S12
S11
S10
S9
S7
1 2 3 4 5
6 7 8 9 10
11 12 13 14 15
16 17 18 19 20
(11G ~ 9G)
(8G)
(7G ~ 3G)
(6G ~ 3G)
(2G)
(1G)

ANODE CONNECTION

	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G
S23	B10	B10	B10	(	d	d	d	d	d	s, t w, x	20
S22	B1	B1	B1	B1	j , p	j , p	j , p	j , p	j , p	u, v y, z	19
S21	B11	B11	B11	S8	n	n	n	n	n	3 e	18
S20	B2	B2	B2	B2	r	r	r	r	r	3 c	17
S19	B12	B12	B12	)	c	c	c	c	c	3a,3d,3g	16
S18	B3	B3	B3	B3	e	e	e	e	e	3b	15
S17	B13	B13	B13	○	m	m	m	m	m	2e	14
S16	B4	B4	B4	B4	g	g	g	g	g	2c	13
S15	B5	B5	B5	B5	f	f	f	f	f	2a,2d,2g	11
S14	B15	B15	B15	**DD NR**	b	b	b	b	b	S3	10
S13	B6	B6	B6	B6	k	k	k	k	k	j, m, q	9
S12	B16	B16	B16	B10	h	h	h	h	h	h, l, p	8
S11	B7	B7	B7	B7	a	a	a	a	a	k, n, r	7
S10	B14	B14	B14	**REC**	S 7	col 3	col 1	–	**KHz**	2 b	12
S9	B17	B17	B17	B11	S 6	**AUTO**	**TUNE**	((◎))	**SLEEP**	1 e	6
S8	B8	B8	B8	B8	▷	–	col 2	–	**MHz**	1a,1d,1g	5
S7	B18	B18	B18	B12	◁	1d	1d	1d	1d	1c	4
S6	B9	B9	B9	B9	**REC**	1e	1e	1e	1e	1b	3
S5	▭	▭	▭	B13	S5	1c	1c	1c	1c	**B**	2
S4	–	–	–	B14	—	1g	1g	1g	1g	**1**	1
S3	–	–	–	B15	/	1f	1f	1f	1f	↩	**EDIT**
S2	–	–	–	B16	🕒	1b	1b	1b	1b	**A**	**AI**
S1	–	–	–	B17	S4	1a	1a	1a	1a	**RANDOM**	**PRGM**
ST1	S12	S11	S10	S9 ⧗	–	–	–	–	–	S2	S1
ST2	**PRGM**	**GEQ**	**MANUAL**	–	–	–	–	–	–	–	–
ST3	–	–	–	**BBE**	–	–	–	–	–	–	–

ADJUSTMENT – 1 < TUNER >



Initialized Condition
GEQ VR : OFF
BBE SW : OFF
MIC VR : Minimum
BALANCE VR : Center
MAIN VR : Variable
DOLBY NR SW : OFF
T-BASS : OFF

(TUNER SECTION)

1. Clock Frequency Adjustment
   Settings : • Test point : TP1 (CLK)
   • Adjustment location : TC701
   Method : Set to AM 1602kHz and adjust so that the test point becomes 2052kHz ± 0.01kHz.

2. MW VT Check
   Settings : • Test point : TP2 (VT)
   • Adjustment location : TU101 (L981)
   Method : Set to AM 1602kHz and adjust so that the test point becomes 6.8V ± 0.5V.

3. LW VT Adjustment
   Settings : • Test point : TP2 (VT)
   • Adjustment location : L942
   Method : Set to LW 144kHz and adjust so that the test point becomes 1.5V ± 0.05V.

4. LW Tracking Adjustment
   Settings : • Test point : TP6 (IC501, PIN①/PIN⑯)
   L941 ··144kHz
   TC942 ···290kHz

5. MW Tracking Adjustment
   Settings : • Test point : TP6 (IC501, PIN①/PIN⑯)
   Adjustment location : TU101 (L982)
   Method : Set to AM 999kHz and adjust to so that the test point becomes 53 ± 6dB.

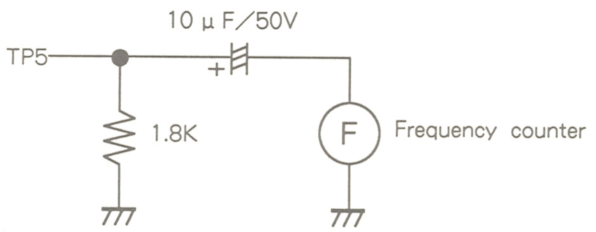
6. MW IF Adjustment
   Settings : • Test point : TP6 (IC501, PIN①/PIN⑯)
   L742 ··450kHz

7. FM VT Adjustment
   Settings : • Test point : TP2 (VT)
   • Adjustment location : L807
   Method : Set to FM 87.5MHz and adjust L807 so that the test point becomes 2.9V ± 0.05V.

8. FM Tracking Adjustment
   Settings : • Test point : TP6 (IC501, PIN①/PIN⑯)
   TC801, TC802 ····················108MHz (Except Z)
   TC801, TC802, TC803 ····················108MHz (Z)
   L802, L804 ······················ 87.5MHz (Except Z)
   L802, L804, L831 ························ 87.5MHz (Z)

9. DC Balance/MONO Distortion Adjustment
   Settings : • Test point : TP3, TP4 (DC balance)
   TP6 (IC501, PIN①/PIN⑯)
   (Distortion)
   • Adjustment location : L741
   • Input level : 54dB
   Method : Set to FM 98.0MHz and adjust L741 so that the voltage between TP3 and TP4 becomes 0V ± 0.02V.
   Next, the distortion is check less than 0.9%.

10. MPX VCO Adjustment
    Settings : • Test point : TP5
    • MODE SW : STEREO
    • Adjustment location : SFR721
    • Input level : 54dB
    Method : Connect a capacitor and a resistor as below. Set to FM 98.0MHz and adjust so that the frequency at test point becomes 38kHz ± 0.05kHz.



11. Light on tuning LED Adjustment
    Settings : • Adjustment location : SFR722
    • Input level : 16dB
    Method : Set to FM 98.0MHz and adjust TUNING LED to light on by SFR722. After that, LED goes out by 2dB down.

PRACTICAL SERVICE FIGURE

< TUNER SECTION >

< FM SECTION >

IHF Sensitivity :	2 ± 6dB (Except Z)
(THD 3%)	(at 87.5, 98.0, 108.0MHz)
	7 ± 6dB (Z)
	(at 87.5, 98.0, 108.0MHz)
S/N 50dB Quieting Sensitivity :	
(Except Z)	32 ± 5dB
	(at 87.5, 98.0, 108.0MHz)
S/N 46dB Quieting Sensitivity :	
(Z)	37 ± 6dB
	(at 87.5, 98.0, 108.0MHz)
Signal to Noise Ratio :	More than 64dB (Except Z)
	(at 98.0MHz)
	More than 60dB (Z)
	(at 98.0MHz)
Distortion :	(MONO.)
	Less than 0.9% (at 98.0MHz)
	(STEREO)
	Less than 1.2% (at 98.0MHz)
Stereo Separation :	More than 25dB (at 98.0MHz)
Intermediate Frequency :	10.7MHz

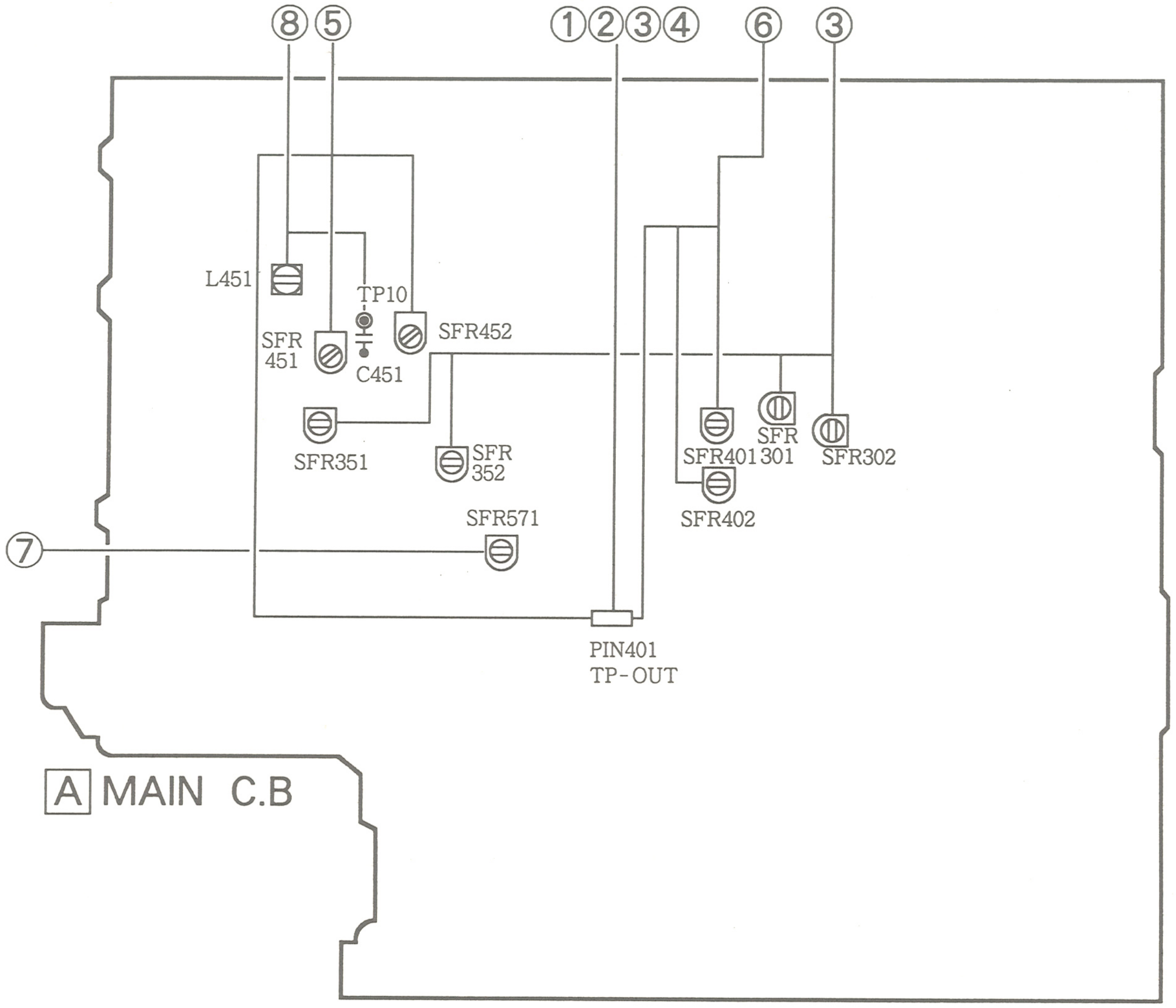
< MW SECTION >

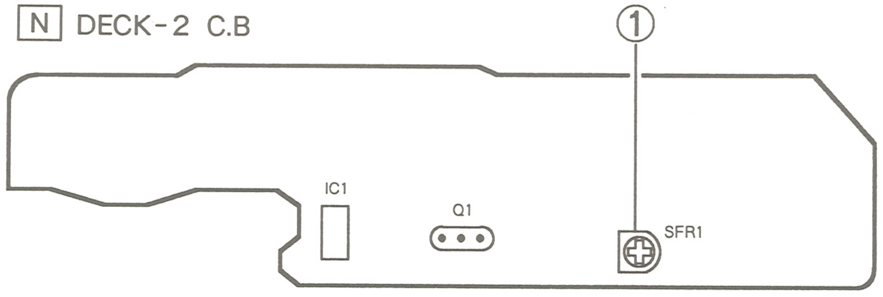
Sensitivity :	54 $\pm^{8}_{6}$ dB
	〔at 603kHz〕
	53 ± 6dB
	〔at 999/1404kHz〕
Distortion :	Less than 1.5%
	〔at 999kHz〕
Intermediate Frequency :	450kHz

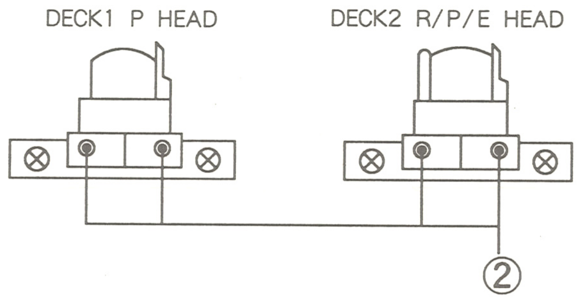
< LW SECTION >

Sensitivity :	66 ± 5dB (at 144kHz)
(S/N 20dB)	63 ± 5dB (at 198kHz)
	62 ± 5dB (at 290kHz)
Signal to Noise Ratio :	More than 32dB (at 198kHz)
Distortion :	Less than 1.5% (at 198kHz)
Intermediate Frequency :	450kHz

ADJUSTMENT – 2 < DECK >







(DECK SECTION)

1. Normal Speed Adjustment (DECK-2)
   Settings : • Test tape : TTA-100 (TTA-111S)
   • Test point : TP-OUT (PIN401)
   • Adjustment location : SFR1 (DECK-2)
   Method : Play back the test tape, on FWD PLAY (DECK-2) adjust for 3000Hz ± 5Hz.

2. Head Azimuth Adjustment (DECK-1, DECK-2)
   Settings : • Test tape : TTA-310 (TTA-317E, SCC-1429)
   • Test point : TP-OUT (PIN401)
   • Adjustment location : Head azimuth adjustment screw
   Method : Play back the 10kHz signal of the test tape and adjust so that the output becomes maximum. Next, perform on each FWD PLAY and REV PLAY mode.

3. PB Sensitivity Adjustment (DECK-1, DECK-2)
   Settings : • Test tape : TTA-200 (TCC-130, TTA-161)
   • Test point : TP-OUT (PIN401)
   • Adjustment location :
   SFR301 (DECK-1, Lch)
   SFR302 (DECK-1, Rch)
   SFR351 (DECK-2, Lch)
   SFR352 (DECK-2, Rch)
   Method : Play back the test tape and adjust so that the output becomes 300mV.

4. PB Frequency Response Check (DECK-1, DECK-2)
   Settings : • Test tape : TTA-310 (TTA-317E, SCC-1429)
   • Test point : TP-OUT (PIN401)
   Method : Play back the 315Hz and 10kHz signals of the test tape and check the output of the 10kHz signal is 0dB ± 2dB with respect to that of the 315Hz signal.

5. REC/PB Frequency Response Adjustment (DECK-2)
   Settings : • Test tape : TTA-601 (TTA-119K)
   • Test point : TP-OUT (PIN401)
   • Input signal : 1kHz/10kHz (VIDEO/AUX)
   • Adjustment location : SFR451 (Lch)
   SFR452 (Rch)
   Method : Apply a 1kHz signal and adjust attenuator so that the level at the TP-OUT is 210mV. Record and play back the 1kHz and 10kHz signals and adjust so that the output level of 10kHz signal is 0dB ± 0.5dB for 1kHz signal.

6. REC/PB Sensitivity Adjustment (DECK-2)
   Settings : • Test tape : TTA-601 (TTA-119K)
   • Test point : TP-OUT (PIN401)
   • Input signal : 1kHz (VIDEO/AUX)
   • Adjustment location : SFR401 (Lch)
   SFR402 (Rch)
   Method : Apply a 1kHz signal and adjust attenuator so that the level at the TP-OUT is 21mV. Record and play back the 1kHz signal and adjust so that the output level is 21mV ± 0.5dB.

7. Vocal Fader Adjustment
   Settings : • Test point : SP OUT
   • Adjustment location : SFR571
   Method : Add a 2kHz, – 16.5dB signal from AUX. Adjust SFR571 so that the voltage at test point becomes minimum.

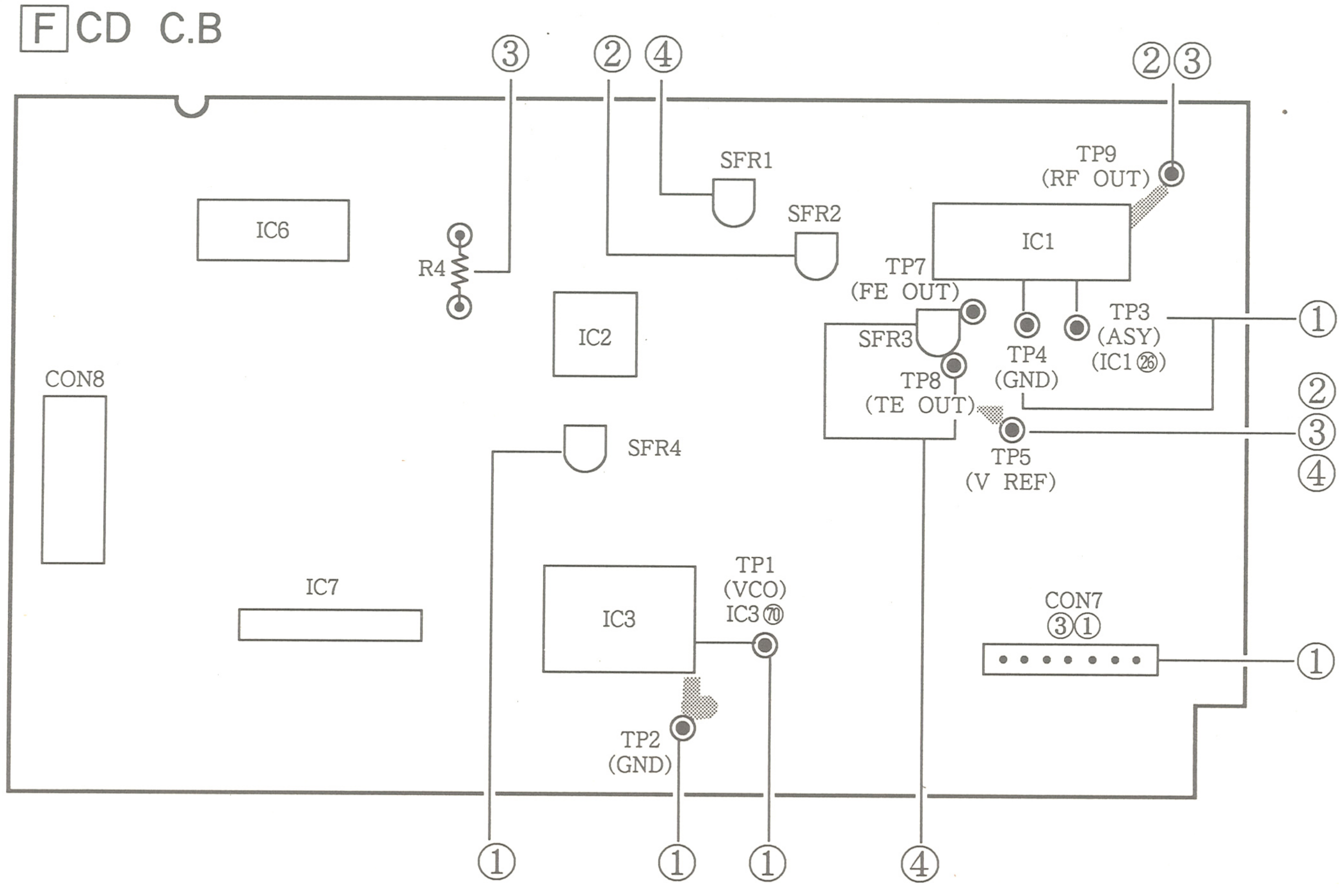
8. Bias Frequency Adjustment
   Settings : • Test tape : TTA-601
   • Test point : TP10
   • Adjustment location : L451
   Method : Set deck to REC mode and adjust L451 so that frequency is 85kHz ± 2kHz at the test point.

PRACTICAL SERVICE FIGURE

< DECK SECTION >

PB Output Level :	2.9V ± 1.5dB (SP OUT) TTA-200 (TTA-161, TCC-130)
REC/PB Output Level :	2.0V ± 2.0dB (SP OUT) TTA-601 (TTA-119K)
Distortion (REC/PB) :	Less than 2.0% (NORMAL, CrO$_2$)
Noise (PB) : (LINEAR)	Less than 130mV/200mV (DOLBY NR ON/OFF, NORMAL, VR MAX.) Less than 100mV/150mV (DOLBY NR ON/OFF, CrO$_2$) VR MAX.)
Noise (REC/PB) : (WTD)	Less than 4mV/12mV (DOLBY NR ON/OFF, NORMAL) Less than 3.3mV/7.5mV (DOLBY NR ON/OFF, CrO$_2$)
Erasing Ratio :	More than 60dB (TTA-601) (at 125Hz)
Channel Separation :	More than 35dB
Recording Bias Frequency :	85kHz
Wow & Flutter (W.RMS) :	Less than 0.4% (DECK-1/2) TTA-100 (TTA-111S)
Tape Speed :	3000 ± 45Hz
Take-up Torque :	30~55g-cm (FWD, REW) (DECK-1/2)
F.F & REW Torque :	75~180g-cm (DECK-1/2)
Back Tension :	2~7g-cm (DECK-1/2)
Test Tape :	NORMAL : TTA-601 (TTA-119K) CrO$_2$: TTA-610 (TTA-119H)

F CD C.B



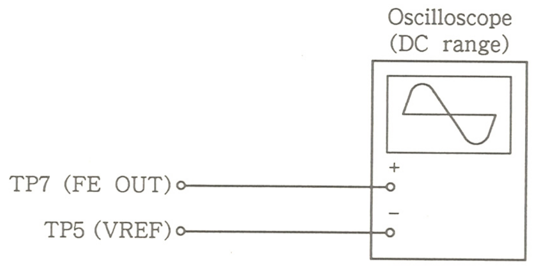
Note : • Connect a probe (10 : 1) of the oscilloscope or the frequency counter to a test point.

① VCO Frequency Adjustment

1. Short pin ① and ③ of CON7 with wire.
2. Connect and short between TP3 (ASY) and TP4 (GND).
3. Connect the frequency counter to test points TP1 (VCO) and TP2 (GND).
4. Adjust SFR4 (VCO) so that the frequency counter reading is 4.27 ± 0.02 MHz.
5. After the adjustment is completed, remove the short lead wires from TP3 (ASY) and TP4 (GND).

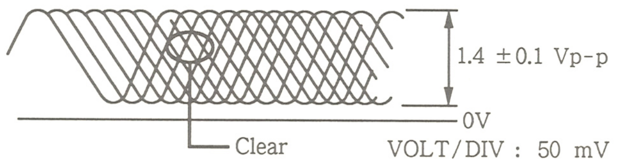
② Focus Bias Adjustment

Make the focus bias adjustment when replacing and repairing the optical block.



1. Connect an oscilloscope to test points TP9 (RF OUT) and TP5 (VREF).
2. Turn on the power switch.
3. Insert test disc TCD-782 (YEDS-18) and play back the second composition.
4. Adjust SFR2 so that the RF waveform of test point TP9 (RF OUT) is maximum and clear.

RF signal waveform



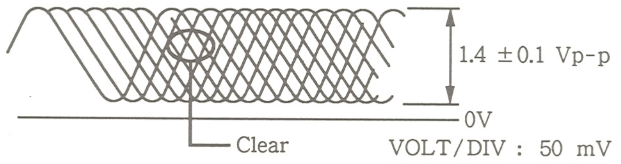
VOLT/DIV : 50 mV
TIME/DIV : 1mS

③ RF Waveform Check

This check should be performed whenever the optical system block is replaced in repair.

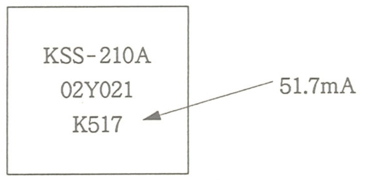
1. Connect an oscilloscope to test points TP9 (RF OUT) and TP5 (VREF).
2. Turn on the power switch.
3. Insert test disc TCD-782 (YEDS-18) and play back the second composition.
4. Check that the waveform appears as shown in the figure below.

RF signal waveform



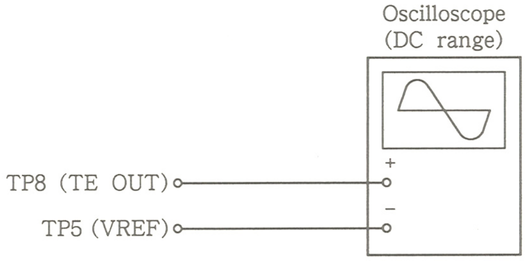
VOLT/DIV : 50 mV
TIME/DIV : 1mS

Note : The current of the laser signal can be checked with the voltages on both sides of R4 (10 Ω). The difference for the specified value shown on the label must be within ± 6.0 mA.

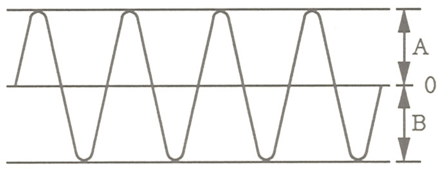


$$\text{Laser current Iop} = \frac{\text{Voltage across R4}}{10\,\Omega}$$

④ Tracking Balance Adjustment



1. Connect an oscilloscope to test points TP8 (TE OUT) and TP5 (VREF).
2. Connected the intermediate point of SFR3 to TP5 (VREF).
3. Turn on the power switch.
4. Insert test disc TCD-782 (YEDS-18) and press the PLAY (▶) button.
5. Adjust SFR1 so that the waveform on the oscilloscope is vertically symmetrical as shown in the figure below.
6. After the adjustment is completed, remove the connected lead wires from the terminals.



A = B

VOLT/DIV : 20 mV
TIME/DIV : 1 mS

⑤ Tracking Gain Adjustment

A servo analyzer is necessary in order to perform this adjustment exactly. However, this gain has a margin, so even if it is slightly off, there is no problem. Therfore, do not perform this adjustment.
Focus/tracking gain determines the pick-up follow-up (vertical and horizontal) relative to mechanical noise and mechinical shock when 2-axis device operates. However, as these gains are reciprocated, the adjustment is performed so that both gains are satisfied.

- When gain is raised, the noise increases when the 2-axis device opearates.
- When gain is lowered, it is more susceptible to mechanical shock and skipping occurs more easily.

When the gain adjustment is not satisfied, the symptoms below appear.

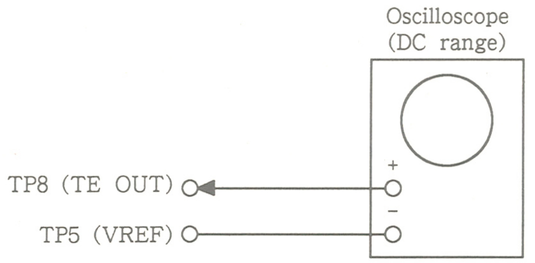
Gain / Symptoms	(Focus)	Tracking
● The time until music starts becomes longer for STOP→▶ PLAY or automatic selection (⏮, ⏭ buttons pressed.) (Normally takes about 2 seconds.)	low	low or high
● Music does not start and disc continues to rotate for STOP →▶ PLAY or automatic selection (⏮, ⏭ buttons pressed.)	–	low
● Disc stops to rotate shortly after STOP→▶ PLAY.	low or high	–
● Sound is interrupted during PLAY. Or time counter display stops.	–	low
● More noises during the 2-axis device operation.	high	high

The following is simple adjustment method.

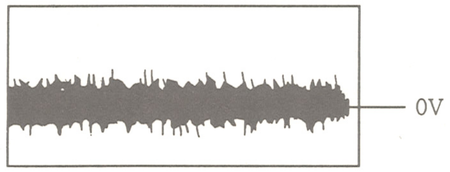
– Simple adjustment –

Note : Since the adjustment cannot be performed exactly, remember the positions of the controls before the adjustment and compare the adjusted position and the original position.
If the difference is a little, return the control to the original position.

Procedure :



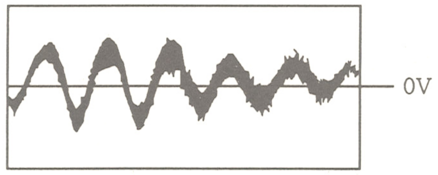
1. Keep the set horizontal. (If the set is not kept horizontally, this adjustment cannot be performed due to the gravity against the 2-axis device.)
2. Insert test disc TCD-782 (YEDS-18) and play back the second composition.
3. Connect an oscilloscope to TP8 (TE OUT) of the main board.
4. Adjust SFR3 so that the waveform appears as shown in the figure below.(tracking gain adjustment)



VOLT/DIV : 5 mV
TIME/DIV : 1 mS

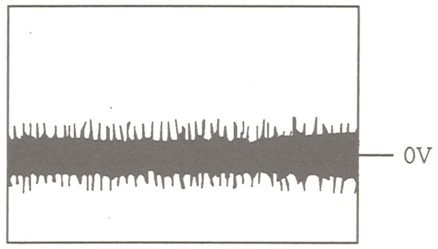
- Incorrect example

Low tracking gain
(The fundamental wave appears as compared with the waveform adjusted.)



VOLT/DIV : 5 mV
TIME/DIV : 1 mS

High tracking gain
(The frequency of the fundamental wave is higher than that in low gain.)



VOLT/DIV : 5 mV
TIME/DIV : 1 mS

IC DESCRIPTION

IC, µPD78044GF – 040

Pin No.	Pin Name	I/O	Description
1～7	G7～G1	O	FL display grid output.
8	VDD	—	Power supply. (+5.4V)
9	$\overline{\text{HOLD}}$	I	When the AC power is not supplied and the input is "L", the controller is hold. (Clock stop and memory maintain)
10	O-F MUTE	O	CD control. (FUNCTION MUTE ON/OFF signal)
11	GEQ CLK	O	Serial data clock signal for GEQ.
12	O-CLK (F)	O	Serial data clock signal for the FUNCTION shift register.
13	O-XLT	O	CD control.
14	O-CLK/ SQ CK (CD)	O	CD control. (Serial data clock signal)
15	O-DATA (CD)	O	CD control. (Serial data)
16	I-SUBQ	I	Sub Q signal from CXD1167Q.
17	$\overline{\text{RESET}}$	I	Reset input.
18	O-DATA (F)	O	Serial data for the FUNCTION shift register.
19	O-STB (F)	O	Strobe signal for the FUNCTION shift register.
20	AVSS	—	Analog Ground.
21	I-KEY 2	I	Key matrix data input.
22	I-FOK/GFS	I	CD control.
23	I-PHOTO	I	CD control. (PHOTO SENSER input)
24	I-CDSW	I	CD tray, pick-up, OPEN/CLOSE, UP/DOWN switch signal.
25	I-KEY 1	I	Key matrix data input.
26	I-KEY 0	I	Key matrix data input.
27	I-TUNE/ST	I	Signal input while the tuner is receiving signals and the stereo ON signal.
28	I-SPEANA	I	Analog input for the spectrum analyzer.
29	A VDD	—	Analog power supply. (+5.6V)
30	VREF	—	Reference voltage. (Connected to A VDD)
31	I-SENS	I	CD control.
32	NC	—	No connection.
33	VSS	—	GND.
34	X1	—	4.19MHz oscillation circuit.
35	X2	—	
36	O-VF	O	Vocal Fader ON signal.
37	O-M DISH F	O	CD disk rotate clockwise signal.
38	O-M DISH R	O	CD disk rotate anti-clockwise signal.
39	O-M OPEN	O	CD tray loading motor OPEN signal.
40	O-M CLOSE	O	CD tray loading motor CLOSE signal.
41	O-CLK (M)	O	Serial data clock signal for the shift register (4094) and PLL IC (LM7001).
42	O-DATA (M)	O	Serial data for the shift register (4094) and PLL IC (LM7001).
43	O-STB (M)	O	Strobe signal for shift register (4094).
44	O-PLL CE	O	PLL IC (LM7001) chip enable output for the tuner.
45	I-SCOR	I	CD control.

Pin No.	Pin Name	I/O	Description
46	$\overline{\text{O-SW SCAN}}$	O	I/O function select (for pin No.55～60) switching control.
47	I-RMC	I	Remote control signal.
48	IC	—	Internal connection. (Connected to GND.)
49	$\overline{\text{O-SOL2}}$	O	Deck 2 Solenoid control. "L" active.
50	$\overline{\text{O-SOL1}}$	O	Deck 1 Solenoid control. "L" active.
51	$\overline{\text{O-POWER}}$	O	Power ON/OFF control. "L" active.
52	VDD	—	Power supply. (+5.4V)
53	S23	O	FL display segment output.
54	S22		
55	S21/ I-$\overline{\text{TM BASE}}$	O/I	FL display segment output/Clock pulse (8Hz) input from PLL IC.
56	S20/ I-$\overline{\text{CST SW1}}$	O/I	FL display segment output/Deck 1 Cassette Sensor input.
57	S19/ I-$\overline{\text{CAM SW1}}$	O/I	FL display segment output/Deck 1 Play input.
58	S18/ I-$\overline{\text{AUTO 1}}$	O/I	FL display segment ouptut/Deck 1 Auto Stop pulse input.
59	S17/ I-$\overline{\text{RE A SW2}}$	O/I	FL display segment ouptut/Deck 2 Side A Rec control.
60	S16/ I-$\overline{\text{RE B SW2}}$	O/I	FL display segment output/Deck 2 Side B Rec control.
61	S15/ I-$\overline{\text{CAM SW2}}$	O/I	FL display segment output/Deck 2 Play input.
62	S14/ I-$\overline{\text{AUTO 2}}$	O/I	FL display segment output/Deck 2 Auto Stop pulse input.
63	S13/ I-$\overline{\text{CST SW2}}$	O/I	FL display segment output/Deck 2 Cassette Sensor input.
64	S12/ I-3 BAND	O/I	FL display segment output/AM 3 Band switching control.
65	S11/ I-AM 10K	O/I	FL display segment output/AM 10kHz step switching control.
66	S10/I-$\overline{\text{MS}}$	O/I	FL display segment output/Music sensor signal input.
67～70	S9～S6	O	FL display segment output.
71	V LOAD	I	Pull-down resistor load for FL. (-29.7V)
72～76	S5～S1	O	FL display segment output.
77～80	G11～G8	O	FL display grid output.

IC,CXD1167Q

Pin No.	Pin Name	I/O	Description
1	FSW	O	Time constant switching output for the spindle motor output filter.
2	MON	O	ON/OFF control output for the spindle motor.
3	MDP	O	Spindle motor drive output, the coarse control in the CLV-S mode and the phase control in the CLV-P mode.
4	MDS	O	Spindle motor drive output, speed control in the CLV-S mode.
5	EFM	I	EFM signal input from the RF amplifier.
6	ASY	O	Output to control the slice level of the EFM signal.
7	LOCK	O	When the GFS signal is sampled by WFCK/16 and it is "H", "H" is output. When "L" is serially output eight times, "L" is output.
8	VCOO	O	VCO output. f = 8.6436MHz when it is locked to the EFM signal.
9	VCOI	I	VCO input.
10	TEST	—	Connected to GND. (0V)
11	PDO	O	Phase comparison output between the EFM and VCO/2 signals.
12	VSS	—	GND. (0V)
13	CLK	I	Serial data transmission clock input from the CPU (μPD78044GF). Data is latched at the starting edge of the clock.
14	XLT	I	Shift register is latched.
15	DATA	I	Serial data 8 bit input from the CPU (μPD78044GF).
16	XRST	I	System reset input. It is reset when "L".
17	CNIN	I	Tracking pulse input.
18	SENS	O	Internal state is output corresponding to the address.
19	MUTG	I	Muting input. When the ATTM of the internal register is "L", the MUTG is "L" and is normal. When "H", there is no sound signal.
20	CRCF	O	Result of the CRC check of sub code Q is output. (Not used.)
21	EXCK	I	Clock input for sub code serial output. (Connected to GND.)
22	SBSO	O	Sub code serial output. (Not used.)
23	SUBQ	O	Sub code Q output for the CPU (μPD78044GF).
24	SCOR	O	Sub code sync S0 + S1 output for the CPU (μPD78044GF).
25	SQCK	I/O	Sub code Q read clock.
26	SQEX	I	SQCK selection input. (Connected to +5V.)
27	DOTX	O	Digital audio interface output. (WFCK is output when OFF.)
28	GFS	O	Display output of the lock state of the frame sync. "H" when it is locked.
29	TEST	I/O	External RAM data terminal, DATA 8 (MSB). (Connected to GND.)
30	TEST	I/O	External RAM data terminal, DATA 7. (Connected to GND.)
31	TEST	I/O	External RAM data terminal, DATA 6. (Connected to GND.)
32	TEST	I/O	External RAM data terminal, DATA 5. (Connected to GND.)
33	VDD	—	Power supply. (+5V)
34	TEST	I/O	External RAM data terminal, DATA 4. (Connected to GND.)
35	TEST	I/O	External RAM data terminal, DATA 3. (Connected to GND.)

Pin No.	Pin Name	I/O	Description
36	TEST	I/O	External RAM data terminal, DATA 2. (Connected to GND.)
37	TEST	I/O	External RAM data terminal, DATA 1 (LSB). (Connected to GND.)
38	TEST	O	External RAM address output, ADDR 01 (LSB). (Connected to GND.)
39	TEST	O	External RAM address output, ADDR 02. (Connected to GND.)
40	TEST	O	External RAM address output, ADDR 03. (Connected to GND.)
41	TEST	O	External RAM address output, ADDR 04. (Connected to GND.)
42	TEST	O	External RAM address output, ADDR 05. (Connected to GND.)
43	TEST	O	External RAM address output, ADDR 06. (Connected to GND.)
44	TEST	O	External RAM address output, ADDR 07. (Connected to GND.)
45	TEST	O	External RAM address output, ADDR 08. (Connected to GND.)
46	TEST	O	External RAM address output, ADDR 09. (Connected to GND.)
47	TEST	O	External RAM address output, ADDR 10. (Connected to GND.)
48	TEST	O	External RAM address output, ADDR 11 (MSB). (Connected to GND.)
49	TEST	O	Write Enable signal output to the external RAM, (Active when "L"). (Connected to GND.)
50	TEST	O	Chip Select signal output to the external RAM, (Active when "L"). (Connected to GND.)
51	C4M	O	1/2 frequency division output to the X'tal. f = 4.2336MHz
52	VSS	—	GND. (0V)
53	XTAI	I	X'tal oscillation circuit input. f = 16.9344MHz
54	XTAO	O	X'tal oscillation circuit output. f =16.9344MHz
55	MD1	I	Mode selection input 1. It is used when "L" Mode selection input 2. It is used when "L" Mode selection input 3. It is used when "L" Clock frequency 8.4672MHz, digital out OFF, digital filter ON. It is used in the following modes.
56	MD2		
57	MD3		
58	SLOB	I	Code switching input of the audio output. 2's complement output when "L", offset binary output when "H". (Connected to GND.)
59	PSSL	I	Mode switching input of the audio data output. Serial output when "L", parallel output when "H". (Connected to GND.)
60	APTR	O	Aperture compensation control output. 88.2kHz when filter ON, 44.1kHz when filter OFF.
61	APTL	O	Aperture compensation control output. 88.2kHz when filter ON, 44.1kHz when filter OFF.
62	C1F1	O	DA01 (LSB of the parallel audio data) output when PSSL = "H". CIFI output when PSSL = "L". (Not used.)
63	C1F2	O	DA02 output when PSSL = "H". C1F2 output when PSSL = "L". (Not used.)
64	C2F1	O	DA03 output when PSSL = "H". C2F1 output when PSSL = "L". (Not used.)
65	C2F2	O	DA04 output when PSSL = "H". C2F2 output when PSSL = "L". (Not used.)
66	C2FL	O	DA05 output when PSSL = "H". C2FL output when PSSL = "L". (Not used.)
67	C2P0	O	DA06 output when PSSL = "H". C2P0 output when PSSL = "L". (Not used.)
68	RFCK	O	DA07 output when PSSL = "H". RFCK output when PSSL = "L". (Not used.)
69	WFCK	O	DA08 output when PSSL = "H". WFCK output when PSSL = "L". (Not used.)
70	PLCK	O	DA09 output when PSSL = "H". PLCK output when PSSL = "L". (Note 1) (Not used.)

Pin no.	Pin Name	I/O	Description
71	VGFS	O	DA10 output when PSSL = "H". VGFS output when PSSL = "L". (Not used.)
72	GTOP	O	DA11 output when PSSL = "H". GTOP output when PSSL = "L". (Not used.)
73	VDD	—	Power supply. (+5V)
74	RA0V	O	DA12 output when PSSL = "H". RA0V output when PSSL = "L". (Not used.)
75	C4LR	O	DA13 output when PSSL = "H". C4LR output when PSSL = "L". (Not used.)
76	$\overline{\text{C210}}$	O	DA14 output when PSSL = "H". C210 output when PSSL = "L".
77	C210	O	DA15 output when PSSL = "H". C210 output when PSSL = "L". (Note 2) (Not used.)
78	DATA	O	DA16 (MSB of the parallel audio data) output when PSSL = "H". DATA output when PSSL = "L". (Note 3)
79	WDCK	O	Strobe signal output. 176.4kHz when filter ON, 88.2kHz when filter OFF. (Not used.)
80	LRCK	O	Strobe signal output. 88.2kHz when filter ON, 44.1kHz when filter OFF.

Note 1: PLCK: VCO/2 output. f = 4.3218MHz when the EFM signal is locked.
Note 2: C210: Bit clock output. f = 2.1168MHz
Note 3: DATA: Serial data output of the audio signal.

IC,CXA1082BQ

Pin No.	Pin Name	I/O	Description
1	VC	I	Connected to VREF.
2	FGD	O	When the high-frequency gain of the focus servo is lowered, a capacitor is connected between this terminal and pin 3.
3	FS3	I	The high-frequency gain of the focus servo is switched with ON/OFF of FS3.
4	FLB	O	Time constant external terminal for raising the low-frequency range of the focus servo.
5	FEO	O	Focus error signal output terminal.
6	FE ⊖	I	Focus amplifier inversion input terminal.
7	SRCH	O	Time constant exterminator terminal to generate the focus search waveform.
8	TG0	O	Time constant external terminal for switching the tracking high-frequency gain.
9	TG2	O	Time constant external terminal for switching the tracking high-frequency gain.
10	AVCC	—	Power supply terminal. (+5V)
11	TAO	O	Tracking error signal output terminal.
12	TA ⊖	I	Tracking amplifier inversion input terminal.
13	SL ⊕	I	Positive input terminal of the sled amplifier.
14	SLO	O	Output terminal of the sled amplifier.
15	SL ⊖	I	Inversion input terminal of the sled amplifier.
16	STOP	I	ON/OFF detection signal terminal of the disk inner-most detection switch.
17	FSET	I	Setting terminal of the phase compensation peak of the focus tracking and CLV LPF (fo).
18	SENS	O	IC internal state output corresponding to data address. (It is changed depending on the address of the internal register.)
19	AVEE	—	Power supply terminal. (Connected to GND.)
20	C. OUT	O	Count signal output of the tracking in the high-speed access mode.

Pin No.	Pin Name	I/O	Description
21	DIRCT	O	It is used when the one-track jump. It is normally set to "H". A direction of the tracking jump pulse is inverted when "L". When setting to "H", it is set to the normal tracking mode. It is set in a time to "L" at the start and fall of TZC. (Not used.)
22	XRST	I	All the internal register are cleared when "L".
23	DATA	I	Serial data transmission from the CPU (μPD78044GF). Input from LSB.
24	XLT	I	Data of the internal serial shift register is transmitted to each latch memory which the address is decoded when "L".
25	CLK	I	Data transmission clock from the CPU (μPD78044GF). Data is read at the falling edge.
26	DGND	—	GND terminal.
27	BW	—	Time constant external terminal of the loop filter.
28	PDI	I	Input terminal of data PDO output from phase comparator CXD1167Q.
29	ISET	I	The current which set the height of the focus search, tracking jump and sled kick is supplied.
30	VCOF	I	The free-running frequency of VCO corresponds to the resist value between pins30 and 31.
31	3.5V	I	
32	C8.64	O	8.64MHz VCO output terminal.
33	LOCK	I	Connected to the LOCK terminal of CXD1167Q.
34	MDP	I	Terminal to connect the MDP terminal of CXD1167Q.
35	MON	I	Terminal to connect the MON terminal of CXD1167Q.
36	FSW	I	LPF time constant external terminal of the CLV servo difference signal.
37	DVCC	—	Power supply terminal. (+5V)
38	SPDL ⊖	I	Inversion terminal of the spindle drive amplifier.
39	SPDLO	O	Spindle motor drive terminal.
40	WDCK	I	Word clock signal input terminal.
41	FOK	I	Focus OK signal input terminal.
42	MIRR	I	Mirror signal input terminal.
43	DVEE	—	GND terminal.
44	DFCT	I	Focus servo and tracking servo are OFF while "H" is being inputting.
45	TE	I	Tracking error signal input terminal.
46	TZC	I	Input terminal of the tracking zero-cross comparator.
47	ATSC	I	ATSC detection window comparator input terminal. Data input terminal to indicate that a mechanical shock is occurred.
48	FE	I	Focus error signal input terminal.

IC,CXA1081M

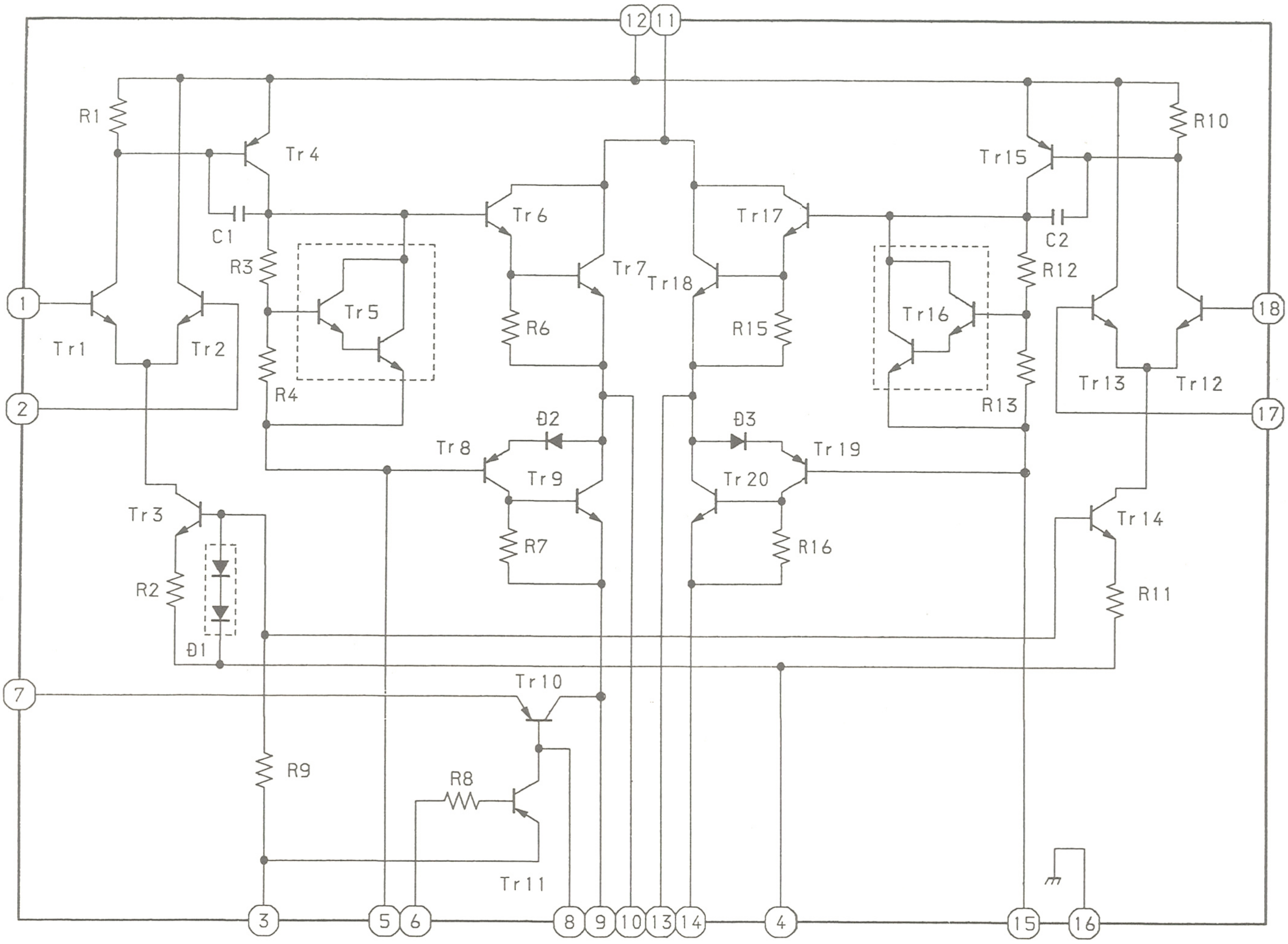
Pin No.	Pin Name	I/O	Description
1	RFI	I	RF summing amplifier output is inputted through the capacitor.
2	RFO	O	RF summing amplifier output, EYE pattern test point.
3	RF ⊖	I	RF summing amplifier inversion input. Feedback resistor is connected between pins ② and ③.
4	P/N	I	Input is switched with the polarity of the laser diode. (Not used.)
5	LD	O	Control output of the laser diode output.
6	PD	I	Photo detector for detecting the laser diode output is connected.
7	PD1	I	RF I-V amplifier (1) inversion input. It is connected to PIN diode A + C.
8	PD2	I	RF I-V amplifier (2) inversion input. It is connected to PIN diode B + D.
9	VC	I	Reference voltage input of IC. It is connected to pin ⑭ (VREF).
10	F	I	F I-V amplifier inversion input. It is connected to PIN diode F.
11	E	I	E I-V amplifier inversion input. It is connected to PIN diode E.
12	EO	O	E I-V amplifier output. It is connected to the feedback resistor.
13	EI	I	E I-V amplifier gain adjustment terminal.
14	VR	O	Intermediate potential (VREF) is output. It is connected to pin ⑨.
15	CC2	O	Defect bottom hold (1) output. Capacitor is connected between pins ⑮ and ⑯.
16	CC1	I	Defect bottom hold (1) output is connected to the capacitor and input.
17	VEE	—	GND.
18	FE BIAS	I	Positive phase bias input of the focus error amplifier.
19	FE	O	Focus error amplifier output.
20	TE	O	Tracking error amplifier output.
21	DEFECT	O	Defect detection output. Mirror defect detection signal is output.
22	MIRR	O	Mirror comparator output.
23	CP	O	Mirror hold capacitor connection terminal.
24	CB	O	Defect bottom hold (2) capacitor connection terminal.
25	D. GND	—	Digital GND.
26	ASY	I	Auto symmetry control input.
27	EFM	O	EFM comparator output.
28	FOK	O	Focus OK output.
29	$\overline{\text{LD ON}}$	I	Laser diode ON/OFF control input. (Connected to GND.)
30	VCC	—	Positive power supply. (+ 5V)

IC, LM7001

Pin No.	Pin Name	I/O	Description
1 2	X-OUT X-IN	—	Connected to the crystal logic oscillator. (7.2MHz)
3 4 5	CE CLK DATA	I	Signal is transmitted from the CPU (μPD78044GF) by operating the key. Active "H".
6	SYC	—	Not used.
7	T-BASE	O	8 Hz output terminal for the clock.
8	MW-L	O	"L" level is output when receiving MW. (Not used.)
9	FM-L	O	"L" level is output when receiving FM.
10	AM IN	I	AM station oscillation signal input terminal.
11	FM IN	I	FM station oscillation signal input terminal.
12 13	VDD1 VDD2	—	Power terminal. 5.5 V
14	PD1	—	Not used.
15	PD2	O	PLL charge pump output terminal.
16	VSS	—	GND terminal.

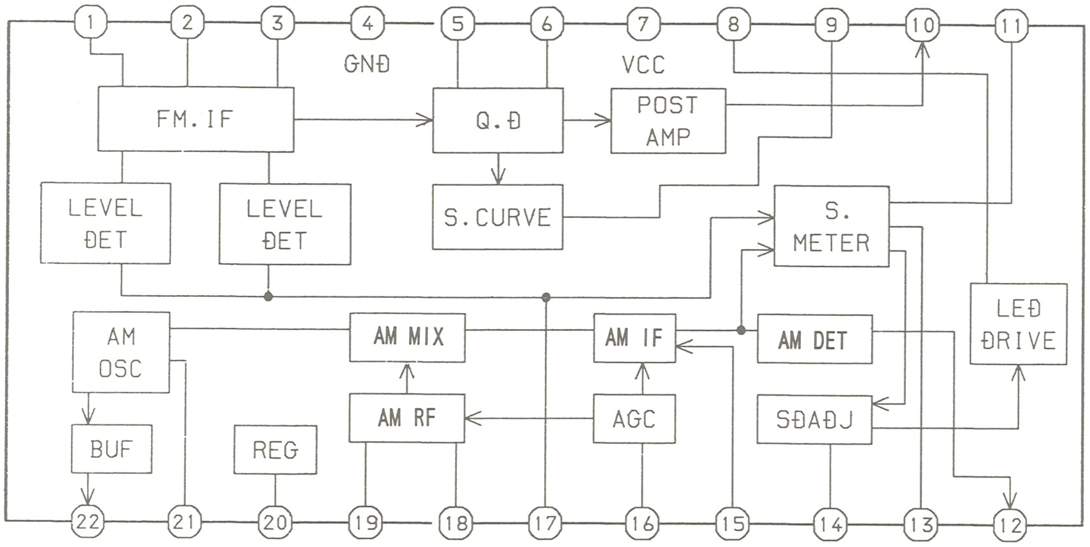
IC BLOCK DIAGRAM

IC,STK4142 – MK2



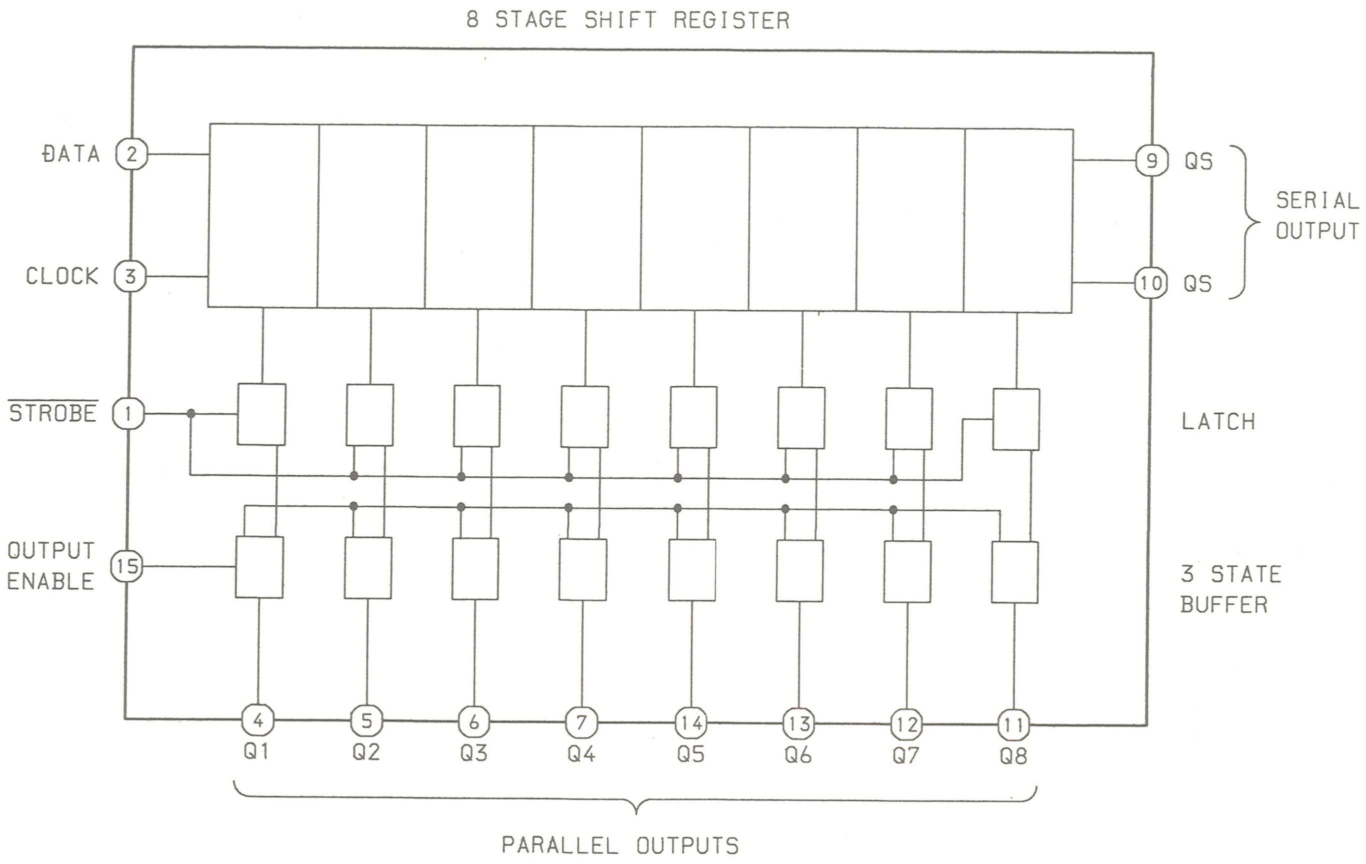
12
11
R1
Tr4
R10
Tr15
Tr6
Tr17
C1
C2
R3
Tr7
Tr18
R12
Tr5
Tr16
1
18
R6
R15
Tr1
Tr2
Tr13
Tr12
R4
R13
2
17
Đ2
Đ3
Tr8
Tr19
Tr9
Tr20
Tr3
Tr14
R7
R16
R2
R11
Đ1
7
Tr10
R9
R8
Tr11
3
5
6
8
9
10
13
14
4
15
16

IC,LA1265S (G)

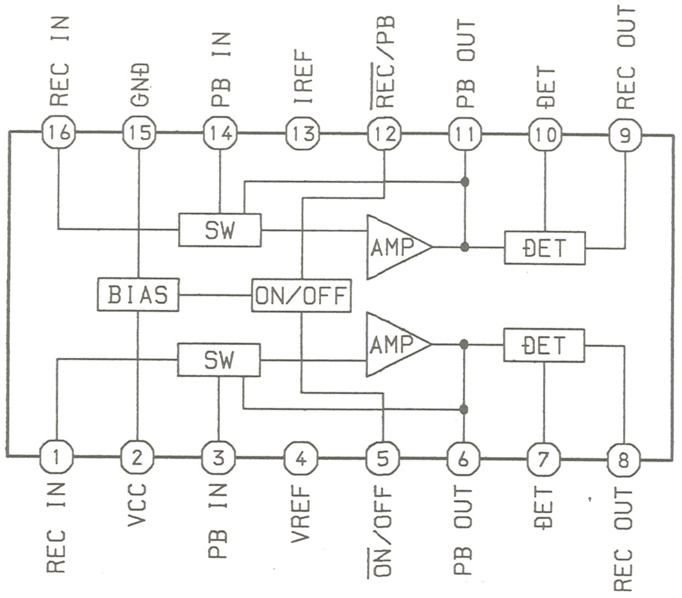


1
2
3
4
5
6
7
8
9
10
11
GNĐ
VCC
FM.IF
Q.Đ
POST AMP
LEVEL ĐET
LEVEL ĐET
S.CURVE
S. METER
LEĐ ĐRIVE
AM OSC
AM MIX
AM IF
AM DET
BUF
AM RF
AGC
SĐAĐJ
REG
22
21
20
19
18
17
16
15
14
13
12

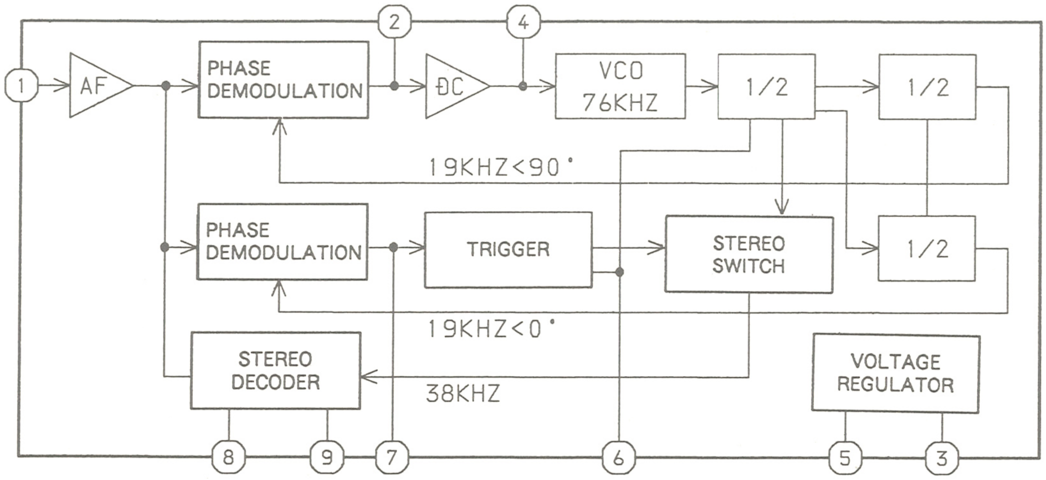
IC,TC4094BP


8 STAGE SHIFT REGISTER
DATA 2
CLOCK 3
$\overline{\text{STROBE}}$ 1
OUTPUT ENABLE 15
9 QS
10 QS
SERIAL OUTPUT
LATCH
3 STATE BUFFER
4 Q1
5 Q2
6 Q3
7 Q4
14 Q5
13 Q6
12 Q7
11 Q8
PARALLEL OUTPUTS

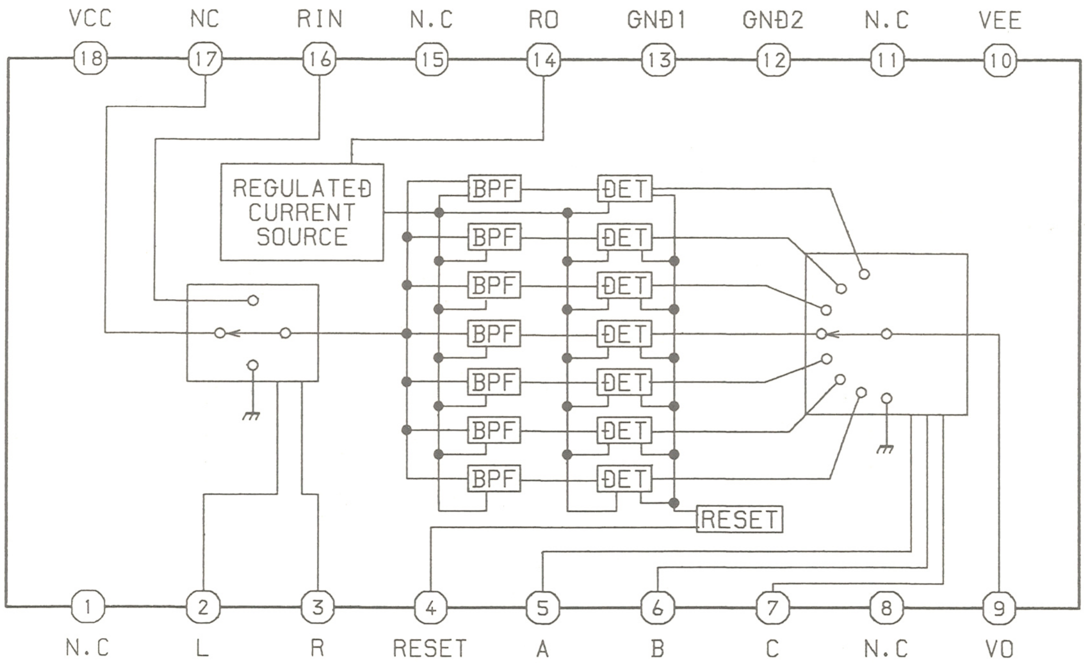
IC,HA12134A


16 REC IN
15 GND
14 PB IN
13 IREF
12 $\overline{\text{REC}}$/PB
11 PB OUT
10 DET
9 REC OUT
SW
AMP
DET
BIAS
ON/OFF
SW
AMP
DET
1 REC IN
2 VCC
3 PB IN
4 VREF
5 $\overline{\text{ON}}$/OFF
6 PB OUT
7 DET
8 REC OUT

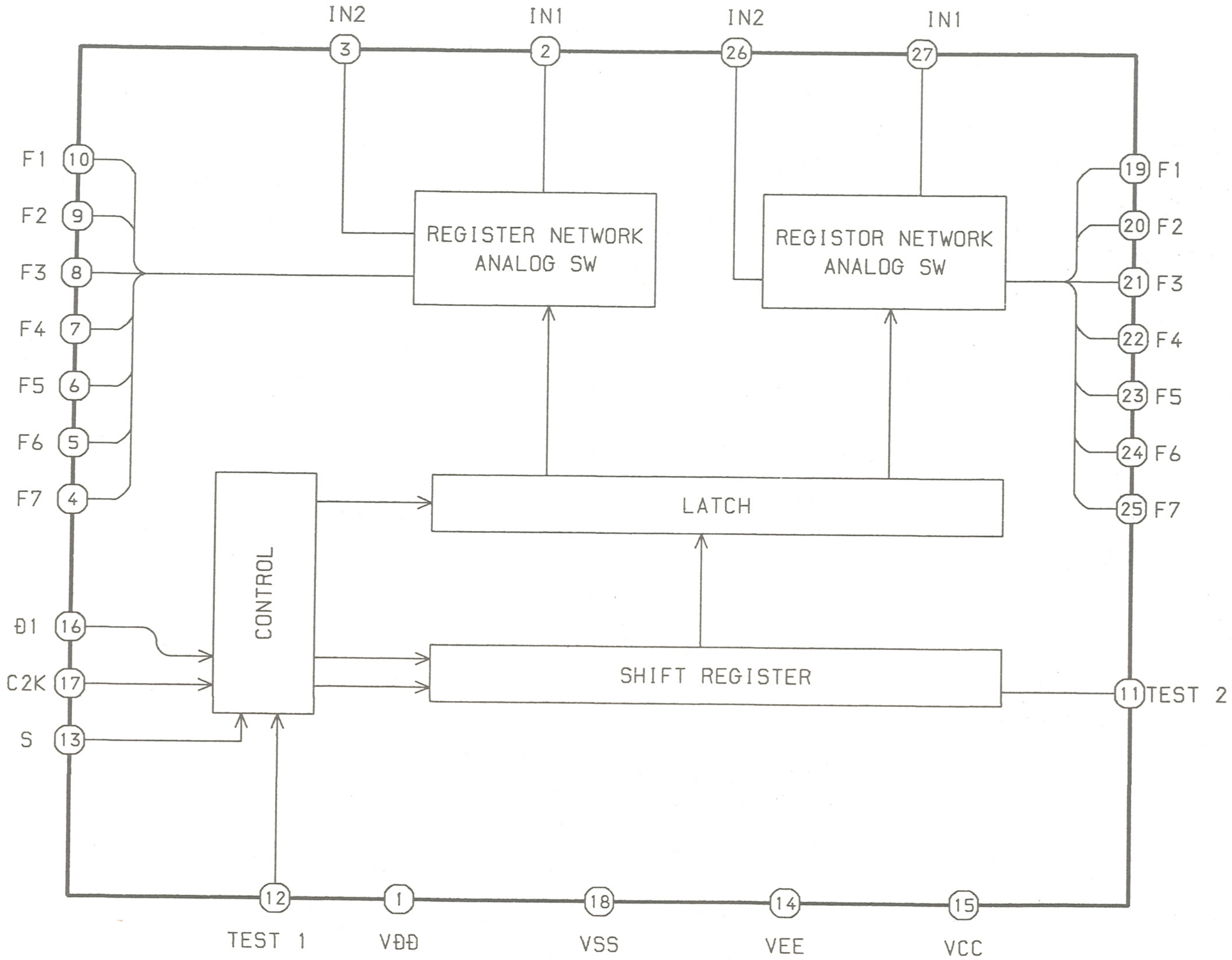
IC,KIA6043S


2
4
1
AF
PHASE DEMODULATION
ĐC
VCO 76KHZ
1/2
1/2
19KHZ<90°
PHASE DEMODULATION
TRIGGER
STEREO SWITCH
1/2
19KHZ<0°
STEREO DECODER
38KHZ
VOLTAGE REGULATOR
8
9
7
6
5
3

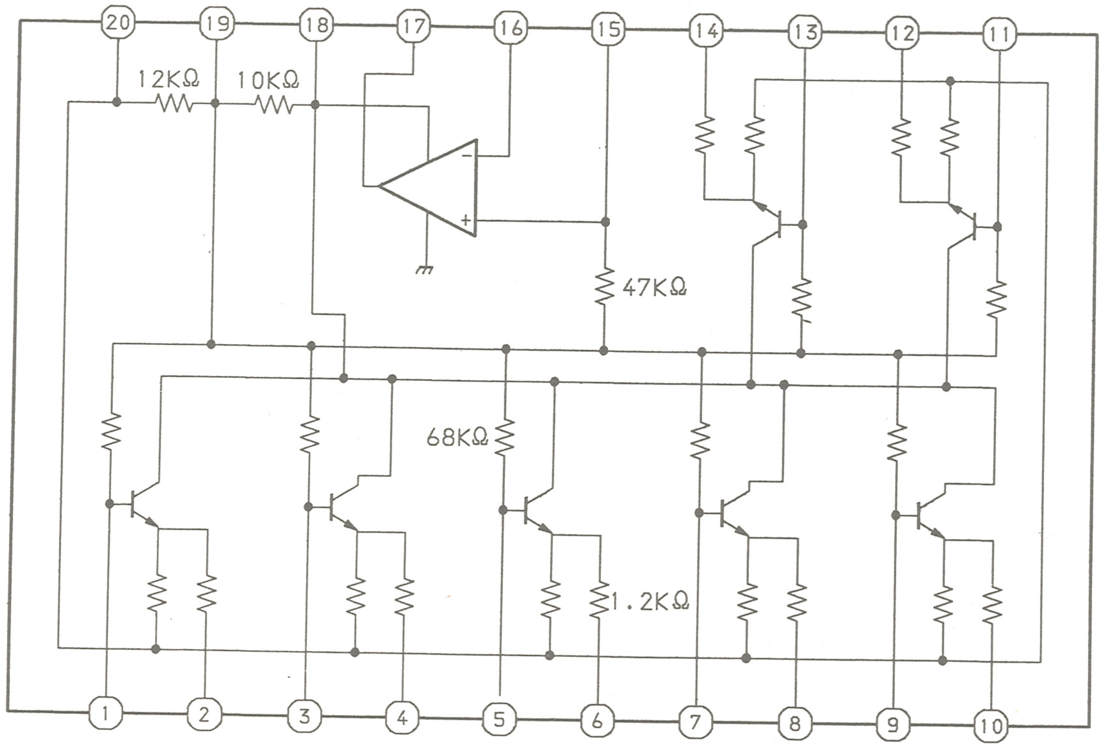
IC,BA3826S


VCC
NC
RIN
N.C
RO
GNĐ1
GNĐ2
N.C
VEE
18
17
16
15
14
13
12
11
10
REGULATEĐ CURRENT SOURCE
BPF
BPF
BPF
BPF
BPF
BPF
BPF
ĐET
ĐET
ĐET
ĐET
ĐET
ĐET
ĐET
RESET
1
2
3
4
5
6
7
8
9
N.C
L
R
RESET
A
B
C
N.C
VO

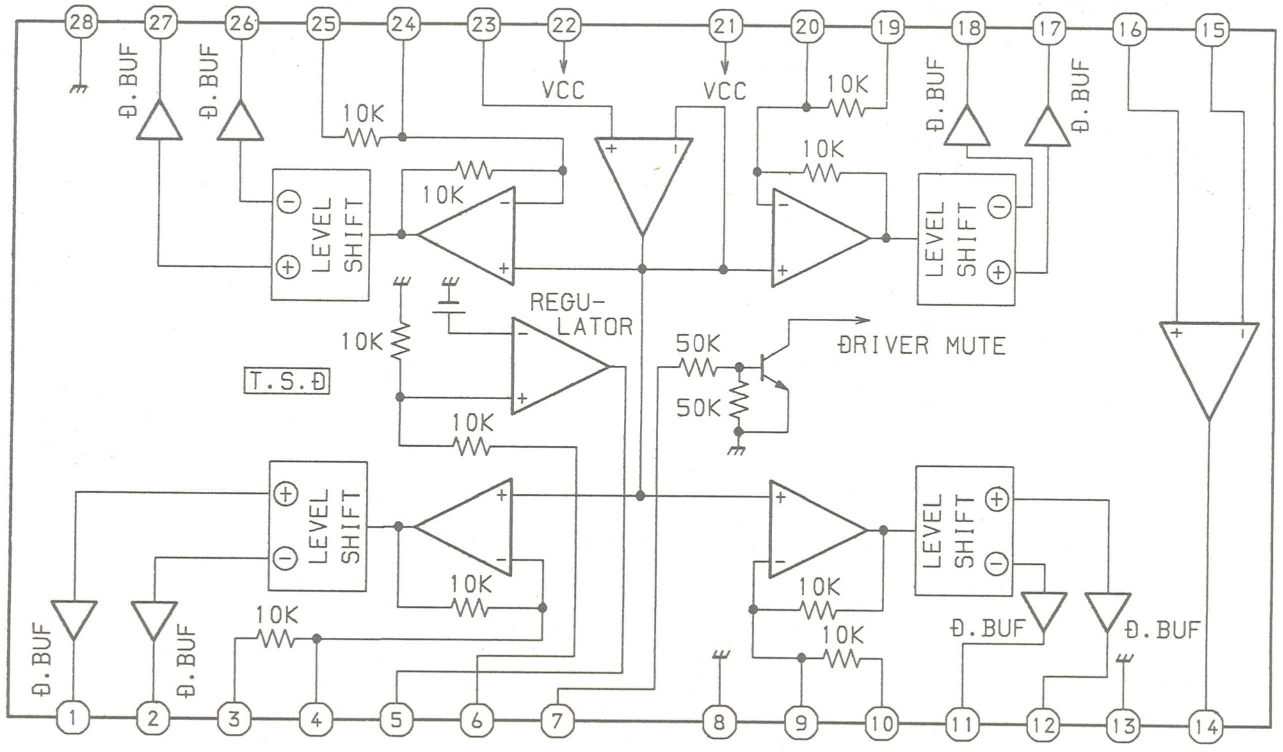
IC,LC7522


IN2
IN1
IN2
IN1
F1
F2
F3
F4
F5
F6
F7
REGISTER NETWORK
ANALOG SW
REGISTOR NETWORK
ANALOG SW
F1
F2
F3
F4
F5
F6
F7
CONTROL
LATCH
Đ1
C2K
S
SHIFT REGISTER
TEST 2
TEST 1
VĐĐ
VSS
VEE
VCC

IC,LA3607

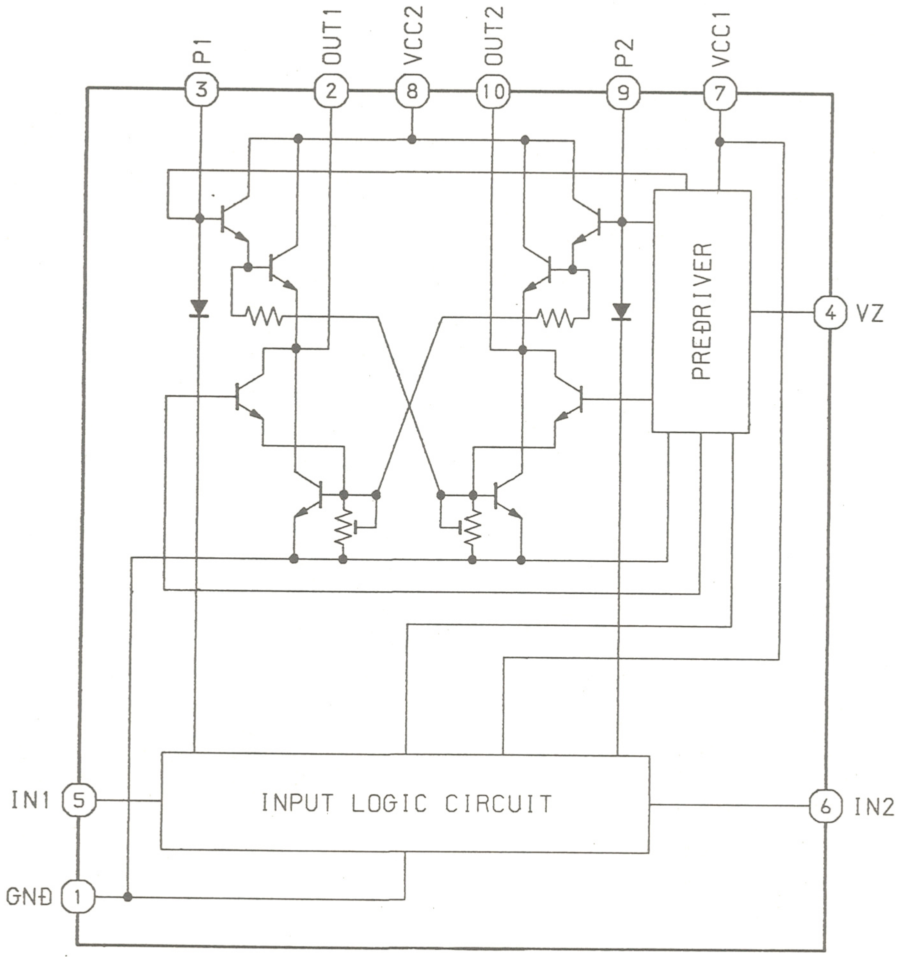

12KΩ
10KΩ
47KΩ
68KΩ
1.2KΩ

IC,BA6296FP

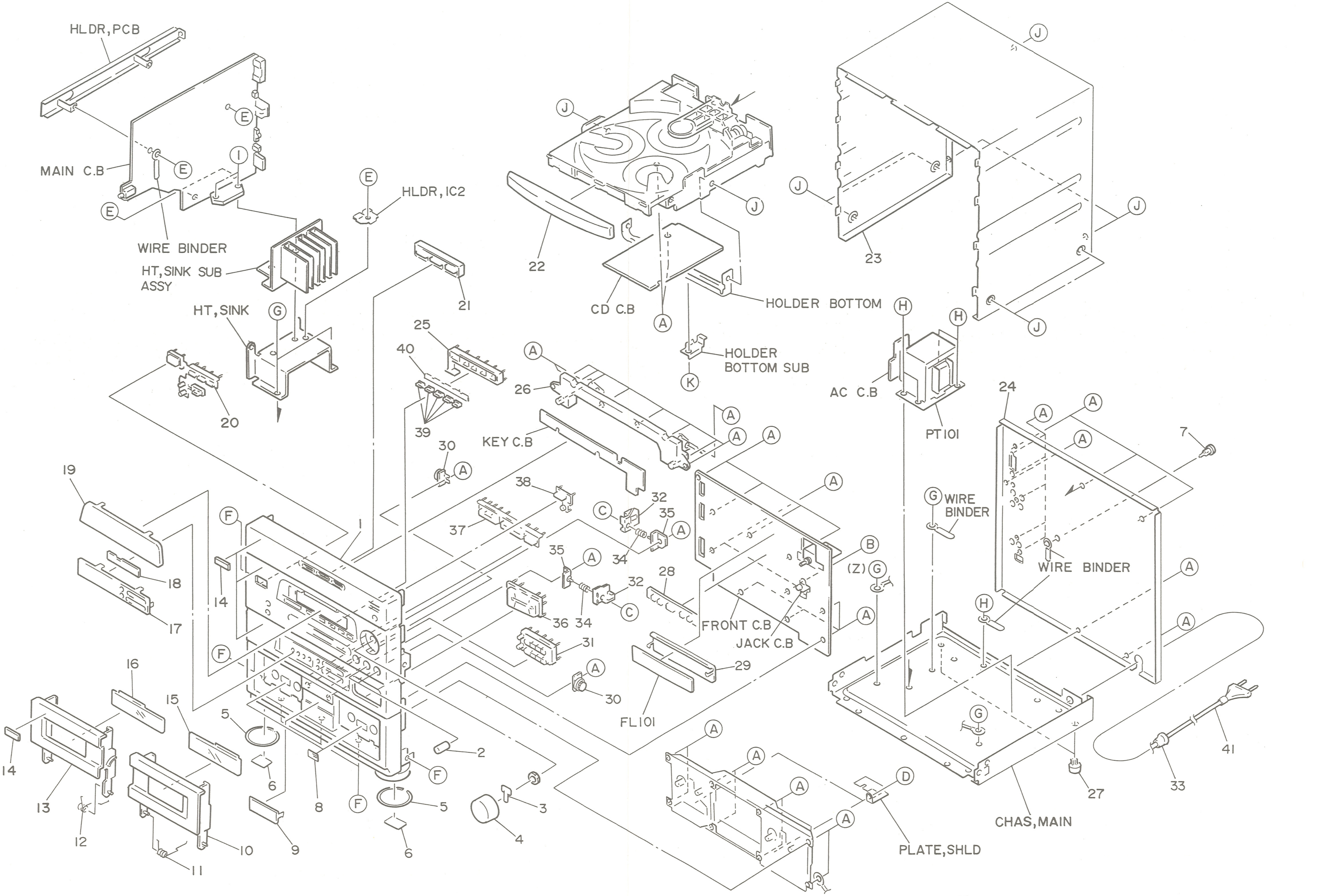

Đ.BUF
Đ.BUF
10K
VCC
VCC
10K
10K
Đ.BUF
Đ.BUF
LEVEL SHIFT
10K
LEVEL SHIFT
REGU-LATOR
10K
T.S.Đ
50K
ĐRIVER MUTE
50K
10K
LEVEL SHIFT
LEVEL SHIFT
10K
10K
10K
Đ.BUF
Đ.BUF
Đ.BUF
Đ.BUF

T.S.Đ:THERMAL SHUT ĐOWN
Đ.BUF:ĐRIVER BUFFER

IC,LB1641


P1
OUT1
VCC2
OUT2
P2
VCC1
PREĐRIVER
VZ
INPUT LOGIC CIRCUIT
IN1
IN2
GNĐ

MECHANICAL EXPLODED VIEW 1/2


HLDR,PCB
MAIN C.B
E
I
WIRE BINDER
HT,SINK SUB ASSY
HT,SINK
G
HLDR,IC2
21
20
25
40
39
30
A
KEY C.B
26
J
22
CD C.B
HOLDER BOTTOM
HOLDER BOTTOM SUB
K
23
H
AC C.B
PT101
24
7
G WIRE BINDER
WIRE BINDER
19
18
17
F
14
1
38
37
32
C
35
34
36
31
28
B
(Z)
FRONT C.B
JACK C.B
29
FL101
16
15
13
12
10
11
9
5
6
8
2
3
4
D
PLATE,SHLD
27
CHAS,MAIN
33
41

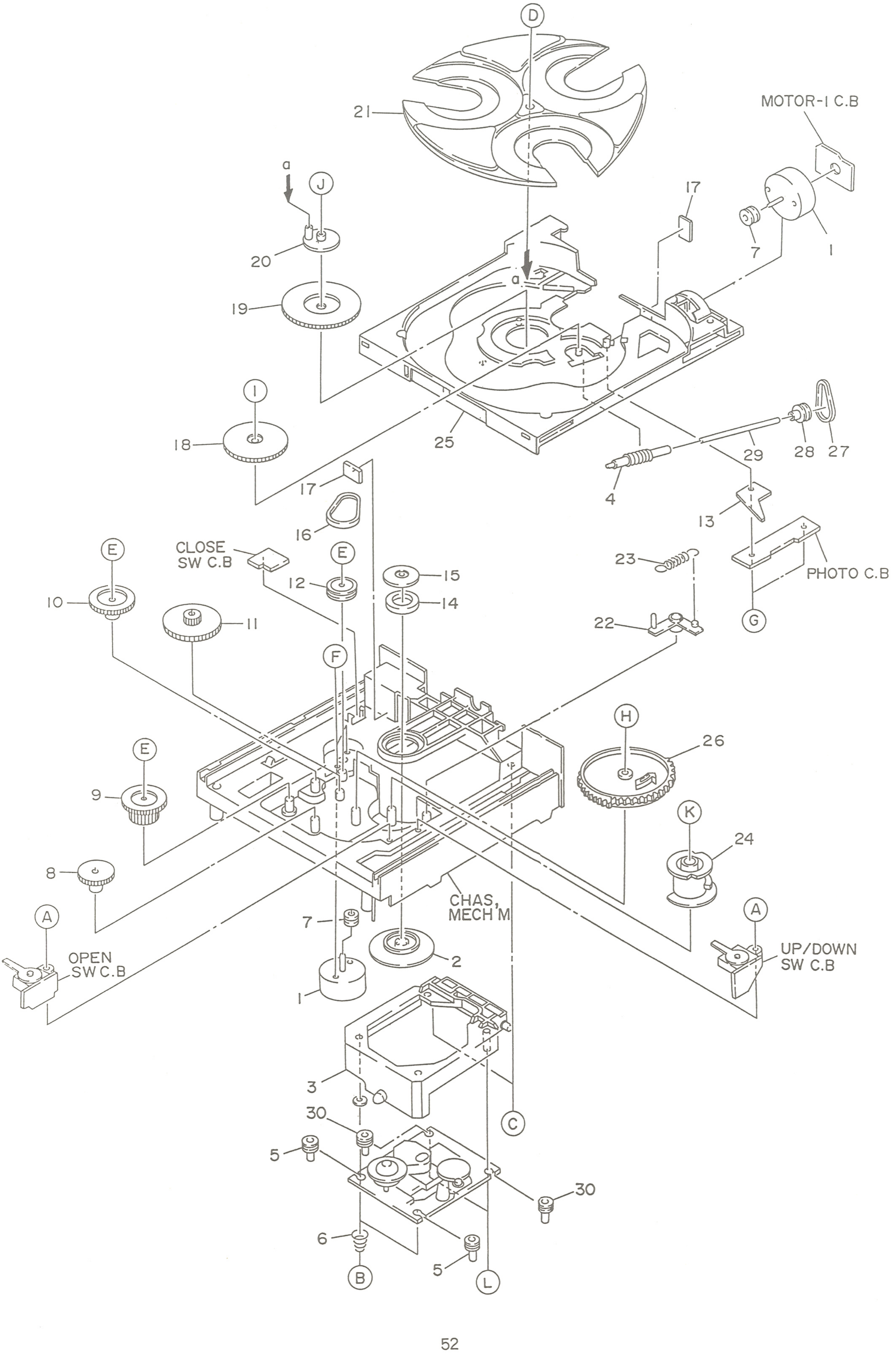
MECHANICAL PARTS LIST 1/2

DESCRIPTIONで判断できない物は “REFERENCE NAME LIST” を参照してください。
If can't understand for Description please kindly refer to “REFERENCE NAME LIST”.

REF. NO	PART NO.	ｶﾝﾘ NO.	DESCRIPTION
1	83-MA1-003-019		CAB, FR E
2	81-MX4-019-019		KNOB, MIC
3	82-MA2-026-019		IND, VOL
4	82-MA2-023-019		KNOB, VOL
5	81-VW1-015-019		RING FOOT
6	83-MA1-203-019		FELT, 15-20-2 LEG
7	87-084-077-019		NYLON RIVET DIA 3.5 - 4.5
8	81-532-080-019		LBL, CASS-COMPT
9	83-MA1-069-019		WINDOW, CL
10	83-MA1-018-219		BOX, CASS R
11	83-MA1-209-019		SPR-T CASS R
12	83-MA1-207-019		SPR-T CASS L(G)
13	83-MA1-017-219		BOX, CASS L
14	81-DS1-011-019		BADGE, AIWA N
15	83-MA1-068-019		WINDOW, BOX R
16	83-MA1-067-019		WINDOW, BOX L
17	83-MA1-074-119		WINDOW, GEQ
18	83-MA1-089-019		PLATE, GEQ
19	83-MA1-061-019		WINDOW, CD DISPLAY
20	83-MA1-029-119		KEY, POWER
21	83-MA1-021-019		KEY, CD SELECT
22	83-MA1-006-019		PANEL, CD
23	83-MA1-007-118		CAB, STEEL(G)
24	83-MA1-016-019		PANEL, REAR E〈EE, E, E1〉
24	83-MA1-010-119		PANEL, REAR K〈K〉
24	83-MA1-011-019		PANEL, REAR Z〈Z〉
25	83-MA1-201-119		KEY, FN
26	83-MA1-213-019		HLDR, CD FR
27	87-085-224-010		FOOT, H17
28	83-MA1-618-019		GUIDE , PLAY

REF. NO	PART NO.	ｶﾝﾘ NO.	DESCRIPTION
29	82-NF5-212-019		GUIDE FL
30	87-064-167-019		OIL DMPR 150
31	83-MA1-037-019		KEY, PRESET
32	80-CD3-233-010		PLATE, LOCK
33	87-085-185-010		BUSHING, AC CORD E
34	81-715-234-019		SPR-C, LOCK PLATE
35	81-693-209-010		HOLDER LOCK ASSY
36	83-MA1-040-119		KEY CURSOR ASSY
37	83-MA1-032-019		KEY, PLAY
38	83-MA1-022-019		KEY, CD OPEN
39	83-MA1-051-019		BTN, FN
40	83-MA1-088-019		SH, FUN
41	87-050-029-019		AC CORD ASSY, K3P〈K〉
41	87-050-016-019		AC CORD E〈EXCEPT K〉
A	87-067-703-019		BVT2+3-10 (W/0 SLOT)
B	81-MK1-210-019		S-SCREW BFT2+3-16
C	87-081-808-019		PW, 1.7-3.5-0.25
D	87-571-032-419		VIT+2-3
E	87-067-579-019		BVT 2+3-8 W/0 SLOT
F	87-591-094-419		QIT + 3 - 6 GOLD
G	87-067-584-019		BVT2+3-6 W/0 SLOT
H	87-067-585-019		BVTT +4-6
I	87-067-581-019		BVT2+3-15 W/0 SLOT
J	87-067-641-019		UTT2+3-8 W/0 SLOT BLK
K	87-067-716-019		BVTT+3-6 BLK

MECHANICAL EXPLODED VIEW 2/2

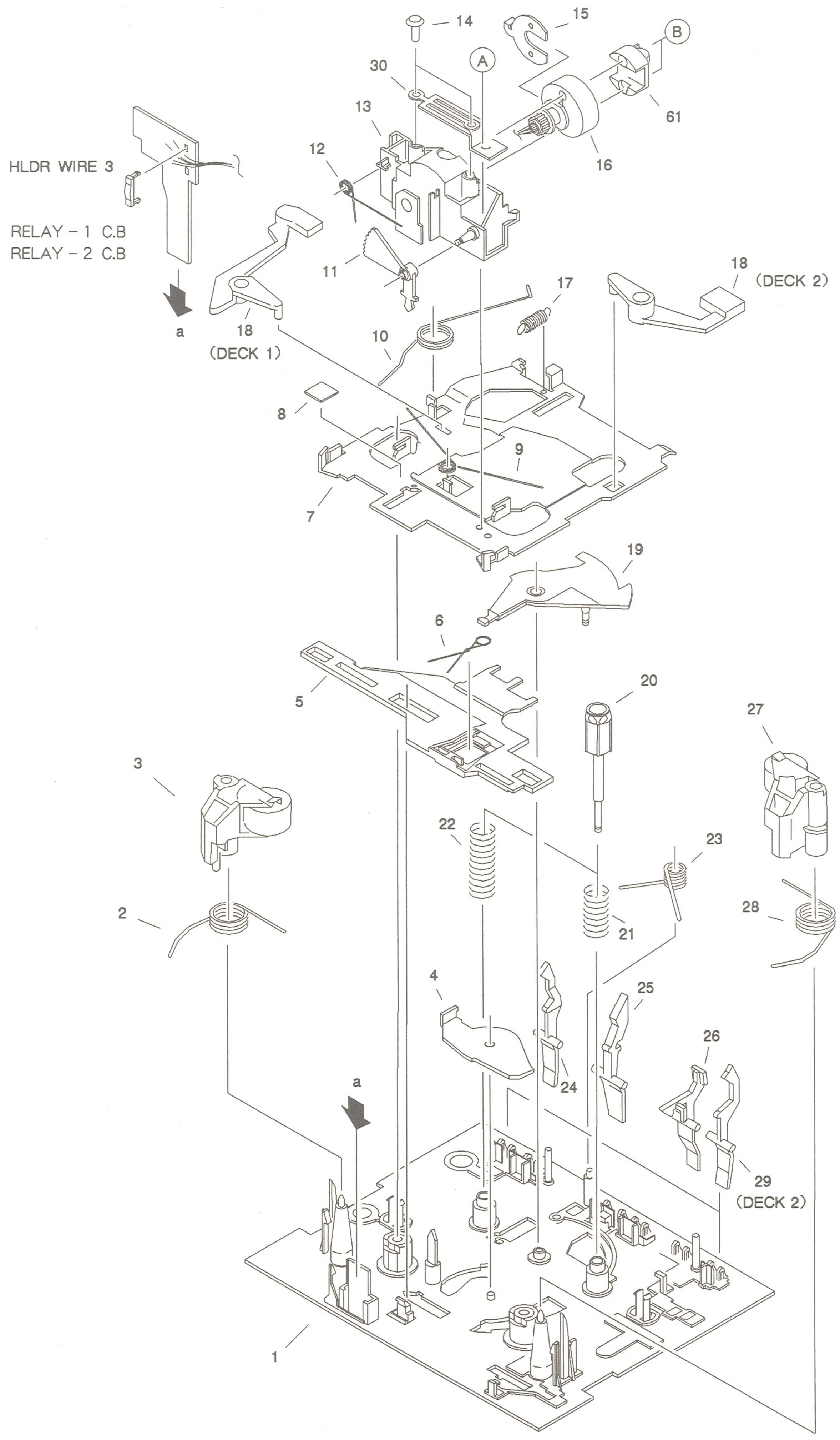


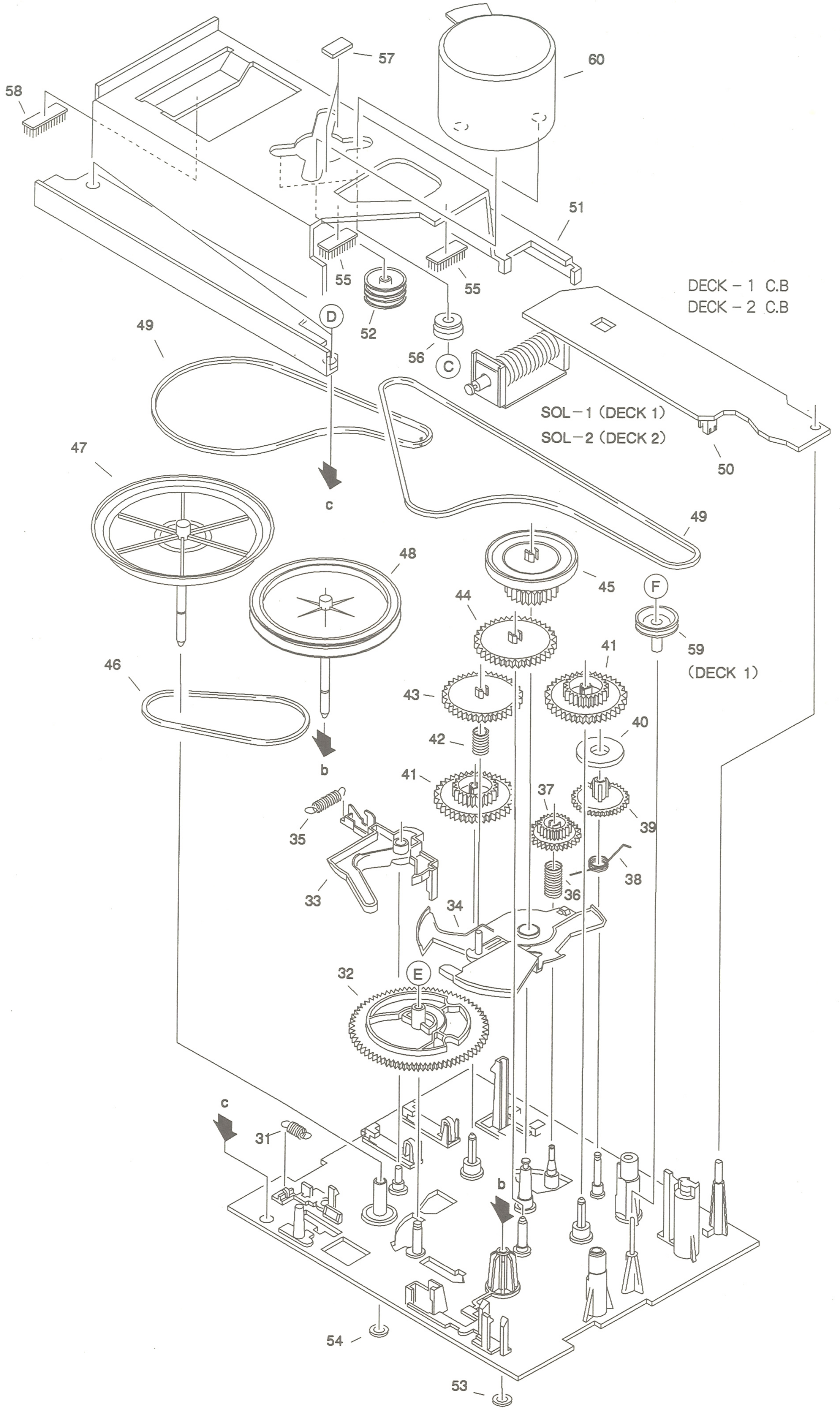
D
21
MOTOR-1 C.B
a
J
17
7
1
20
a
19
I
18
25
29
28
27
4
17
16
13
E
CLOSE SW C.B
E
15
23
PHOTO C.B
10
12
14
11
22
G
F
H
26
E
9
K
24
8
CHAS, MECH M
A
A
7
OPEN SW C.B
UP/DOWN SW C.B
2
1
3
30
C
5
30
6
5
B
L

MECHANICAL PARTS LIST 2/2

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
1	87-045-305-019		MOTOR, RF-500TB
2	81-ZG1-228-11K		HLDR, MAGNET
3	81-ZG1-253-219		HLDR MECH MK2
4	81-ZG1-276-01K		WORM GEAR, TT NO2
5	81-ZG1-230-010		G-CUSH, MECH
6	81-ZG1-231-010		SPR-C, MECH
7	81-ZG1-212-01K		PULLY, LOAD MO
8	81-ZG1-250-019		GEAR TRAY RELAY MK2
9	81-ZG1-257-019		GEAR TRAY B MK2
10	81-ZG1-256-019		GEAR TRAY A MK2
11	81-ZG1-251-019		GEAR RELAY MK2
12	81-ZG1-211-01K		PULLY, RELAY
13	81-ZG1-240-010		SPR-P, WORM
14	87-036-326-010		MAGNET, CLAMPER
15	81-ZG1-255-119		PLATE, MAGNET MK2
16	81-ZG1-232-010		BELT, TRAY
17	81-ZG1-238-119		CUSH, TRAY IN
18	81-ZG1-222-01K		WORM WHEEL, TT
19	81-ZG1-202-01K		GEAR, MAIN
20	81-ZG1-252-010		LEVER, TT MK2
21	81-ZG1-008-11S		TURNTABLE, NO2
22	81-ZG1-213-110		PLATE CAM
23	81-ZG1-262-019		SPR-E CAM S
24	81-ZG1-206-11K		GEAR, MECH CAM
25	81-ZG1-011-21S		TRAY MK2
26	81-ZG1-205-21K		GEAR, TRAY CAM
27	81-ZG1-233-110		BELT, TT
28	81-ZG1-236-01K		PULLY, TT MO
29	81-ZG1-260-019		SHAFT, WORM S
30	80-CD3-214-019		CUSH, CD A
A	81-653-215-019		SPECIAL SCREW VT2
B	81-ZG1-254-019		S-SCEW, MECH HLDR
C	87-561-096-219		VFT1 +3-10 (DIA 10)
D	81-ZG1-239-019		S-SCREW, TT
E	87-067-945-119		VFT2+3-12(F10)
F	87-251-071-419		U+2.6-4
G	87-067-579-019		BVT 2+3-8 W/O SLOT
H	81-ZG1-264-019		S-SCREW, CAM
I	87-761-095-419		VFT2+3-8W/O SLOT GOLD
J	87-078-029-019		VFT2+3-13(F8)
K	87-067-828-019		VFT2+3-15DIA10, GLD
L	81-ZG1-271-010		S-SCREW MECH REAR

TAPE MECHANISM EXPLODED VIEW 1/1

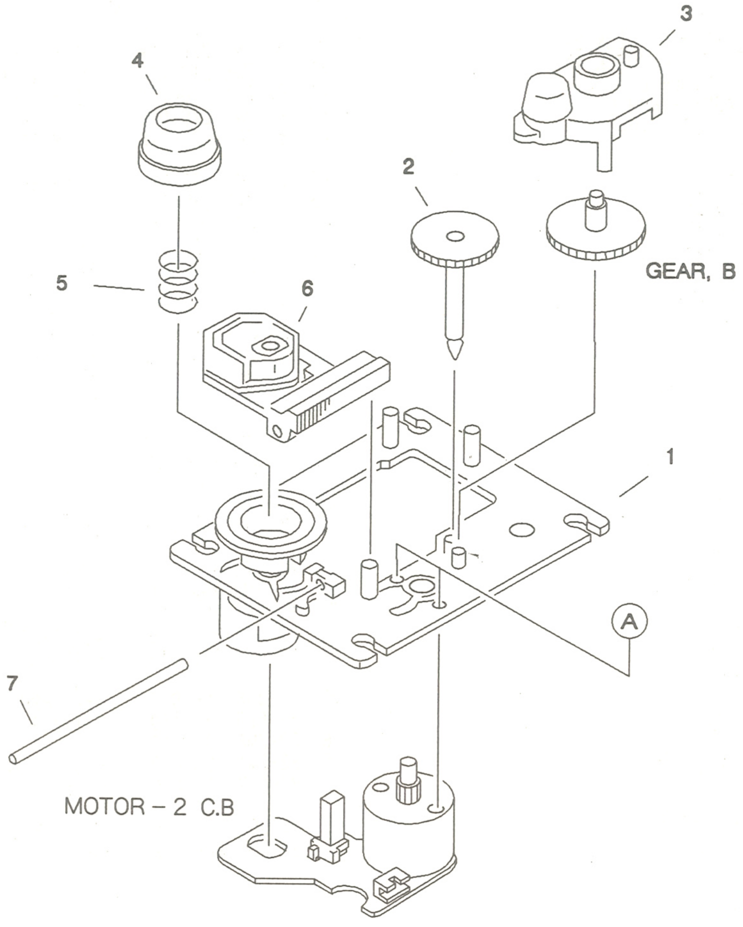

14
15
B
30
A
13
61
12
16
HLDR WIRE 3
RELAY - 1 C.B
RELAY - 2 C.B
11
18
(DECK 2)
17
a
18
(DECK 1)
10
8
9
7
19
6
20
5
27
3
22
23
21
28
2
4
25
24
26
a
29
(DECK 2)
1



TAPE MECHANISM PARTS LIST 1/1

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
1	82-ZM1-299-01K		CHAS ASSY R (DECK 2)
1	82-ZM3-214-11K		CHAS ASSY, P (DECK 1)
2	82-ZM1-258-010		SPR-T, PINCH L
3	82-ZM1-248-11K		LVR ASSY, PINCH L
4	82-ZM1-295-21K		PLATE ASSY, LINK
5	82-ZM1-266-01K		LVR, DIR
6	82-ZM1-214-010		SPR-T, DIR
7	82-ZM1-206-21K		CHAS, HEAD
8	87-078-014-019		SH, 5-5-0. 05
9	82-ZM1-269-010		SPR-T, BRG
10	82-ZM1-219-010		SPR-T, LINK
11	82-ZM1-210-01K		GEAR, H T
12	82-ZM1-213-010		SPR-T, HEAD
13	82-ZM1-207-010		GUIDE, TAPE
14	82-ZM1-283-210		S-SCREW, AZIMUTH
15	82-ZM1-209-01K		PLATE, HEAD
16	82-ZM1-208-010		HLDR, HEAD
17	82-ZM1-218-010		SPR-E, HB
18	82-ZM1-263-11K		LVR, EJECT L (DECK 1)
18	82-ZM1-264-01K		LVR, EJECT R (DECK 2)
19	82-ZM1-222-01K		LVR, PLAY
20	82-ZM1-217-11K		REEL TABLE
21	82-ZM1-244-110		SPR-C, BT
22	82-ZM1-285-110		SPR-C, BTL
23	82-ZM1-257-010		SPR-T, CAS
24	82-ZM1-241-11K		LVR, MC
25	82-ZM1-242-01K		LVR, CAS
26	82-ZM1-243-01K		LVR, STOP
27	82-ZM1-253-11K		LVR ASSY, PINCH R
28	82-ZM1-259-010		SPR-T, PINCH R
29	82-ZM1-240-11K		LVR, REC (DECK 2)
30	82-ZM1-298-010		SPR-P EARTH
31	82-ZM1-255-110		SPR-E, LVR DIR
32	82-ZM1-221-11K		GEAR, CAM
33	82-ZM1-227-11K		LVR, TRIG
34	82-ZM1-224-11K		LVR, FR
35	82-ZM1-305-010		SPR-E, TRIG 2
36	82-ZM1-277-010		SPR-C, PLAY
37	82-ZM1-223-01K		GEAR, PLAY
38	82-ZM1-256-110		SPR-T, FR
39	82-ZM1-220-21K		GEAR, IDLER
40	80-ZM6-217-010		RING MAGNET 2
41	82-ZM1-216-21K		GEAR, REEL
42	82-ZM1-276-010		SPR-C, FR
43	82-ZM1-225-01K		GEAR, FR
44	82-ZM1-226-01K		GEAR, REW
45	82-ZM1-228-210		SLIP DISK ASSY
46	82-ZM1-261-110		BELT, FR
47	82-ZM1-237-210		FLY-WHL ASSY, R (DECK 2)
47	82-ZM3-209-110		FLY-WHL ASSY, R2 (DECK 1)
48	82-ZM1-234-110		FLY-WHL ASSY, L (DECK 2)
48	82-ZM3-207-210		FLY-WHL ASSY, L2 (DECK 1)
49	82-ZM5-202-010		BELT, MAIN 9
50	82-ZM1-245-21K		HLDR, IC
51	82-ZM5-201-01K		HLDR, 200
52	82-ZM3-202-010		PULLEY, MOT 2M
53	82-ZM1-288-019		SH, 1. 63-3. 2-0. 5 SLT
54	80-ZM6-243-019		SH 1. 75-3. 6-0. 5 SLT
55	80-ZM6-230-019		SH BELT
56	86-575-242-010		CUSH-G, DIA3. 7-9-3. 2
57	86-575-361-010		CUSH-G, 6-8-0. 8
58	81-ZM3-204-019		SH, BELT 2
59	82-ZM3-204-010		PULLEY, COUPLER (DECK 1)
60	87-045-347-019		MOT, SHU2L 70 (M1)
61	87-046-355-019		HEAD, PH HADKH2529B (PH)
61	87-046-356-019		HEAD, RPH HADKH5581B (RPH)
A	87-585-036-410		UIT+2-8
B	80-ZM6-207-019		V+1. 6-7
C	82-ZM1-309-010		S-SCREW MOTOR
D	87-067-178-019		VTT+2. 6-3
E	87-067-932-019		PW, 2. 15-6. 8-0. 5 SLT
F	87-067-972-019		PW, 1. 05-3-0. 25 SLT

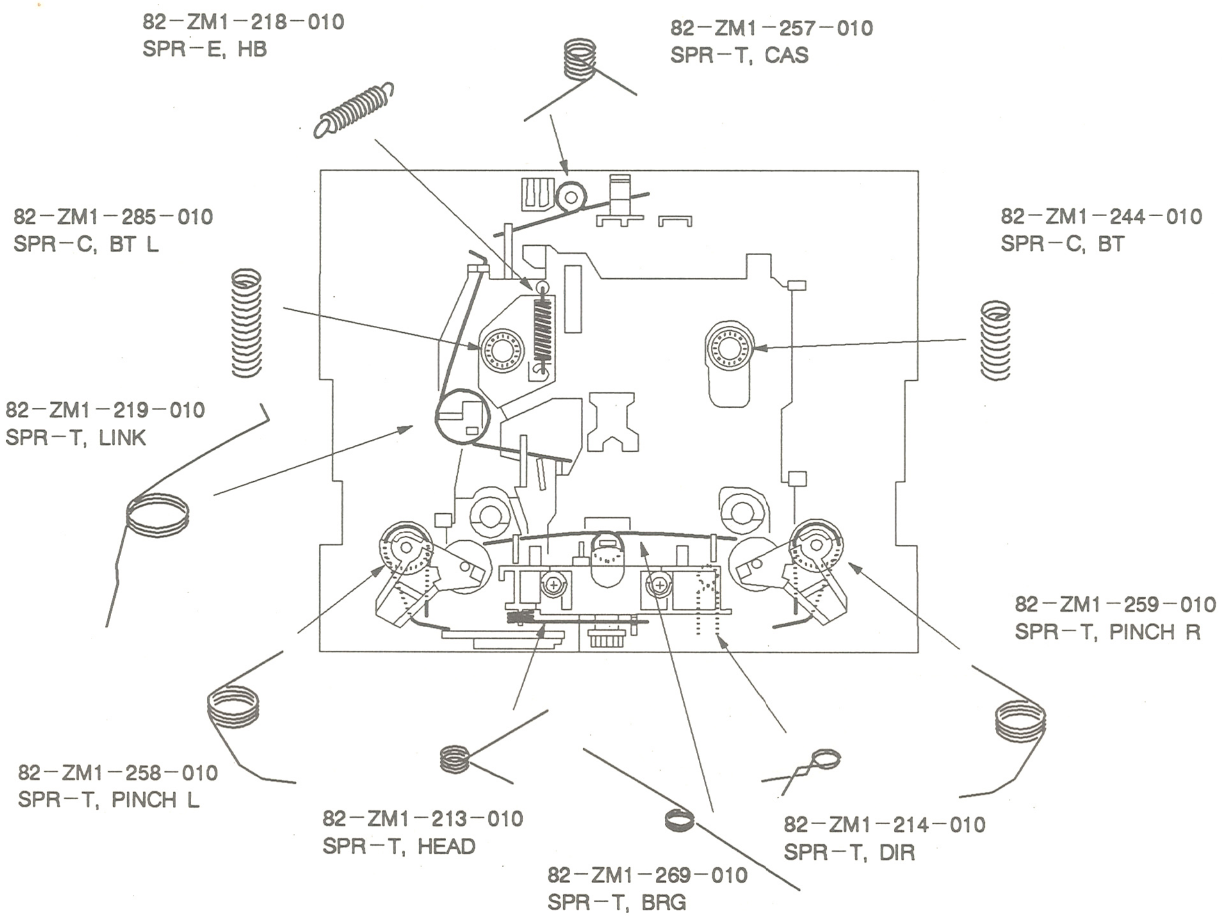
CD MECHANISM EXPLODED VIEW 1/1

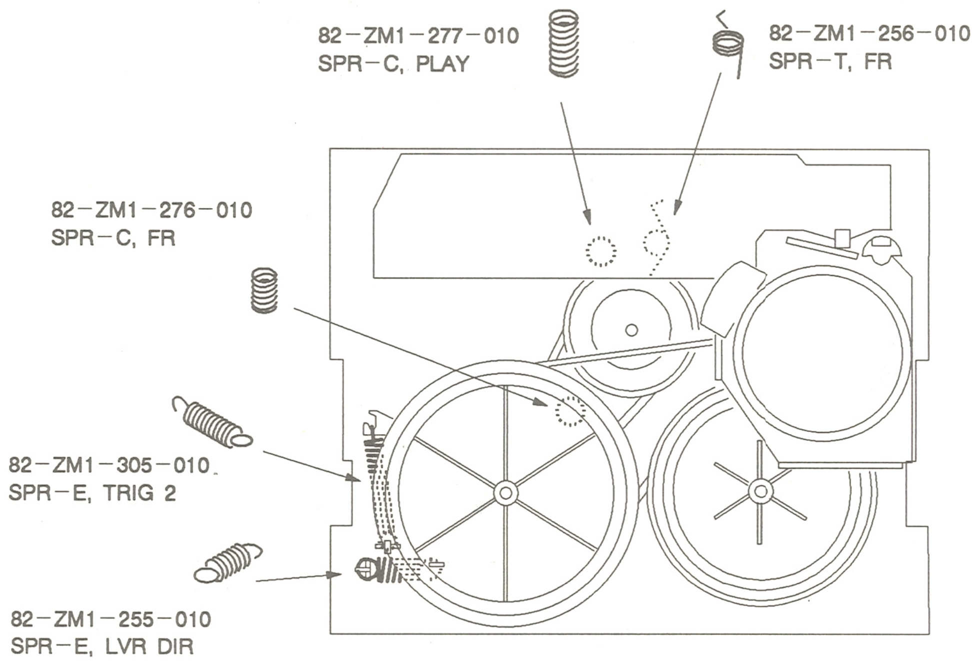

3
4
2
GEAR, B
5
6
1
A
7
MOTOR－2 C.B

CD MECHANISM PARTS LIST 1/1

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
1	9X-262-513-310		T.T CHASS ASSY W/MOTOR
2	92-625-188-020		GEAR(A)
3	92-625-544-010		COVER
4	92-625-187-010		RING CENTER
5	92-625-191-010		SPRING COMPRESSION
6	98-848-127-110		OPTICAL PICK UP KSS-210A
7	94-917-565-010		SHAFT SLED
A	87-261-032-210		V+2-3

SPRING APPLICATION POSITION


82－ZM1－218－010
SPR－E, HB
82－ZM1－257－010
SPR－T, CAS
82－ZM1－285－010
SPR－C, BT L
82－ZM1－244－010
SPR－C, BT
82－ZM1－219－010
SPR－T, LINK
82－ZM1－259－010
SPR－T, PINCH R
82－ZM1－258－010
SPR－T, PINCH L
82－ZM1－213－010
SPR－T, HEAD
82－ZM1－214－010
SPR－T, DIR
82－ZM1－269－010
SPR－T, BRG


82－ZM1－277－010
SPR－C, PLAY
82－ZM1－256－010
SPR－T, FR
82－ZM1－276－010
SPR－C, FR
82－ZM1－305－010
SPR－E, TRIG 2
82－ZM1－255－010
SPR－E, LVR DIR

■ SPEAKER LIST (SX－Z720)

DESCRIPTIONで判断できない物は“REFERENCE NAME LIST”を参照してください。
If can't understand for Description please kindly refer to “REFERENCE NAME LIST”.

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
1	83-MS1-015-019		GRILL FRAME ASSY
2	83-MSE-601-019		SPEAKER WOOFER
3	83-MSE-603-019		SPEAKER TWEETER
4	83-096-614-019		SPEAKER CORD

■ SPEAKER LIST (SX－Z870)

DESCRIPTIONで判断できない物は“REFERENCE NAME LIST”を参照してください。
If can't understand for Description please kindly refer to “REFERENCE NAME LIST”.

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
1	83-MS1-002-010		PANEL FR.
2	83-MS1-005-010		ADAPTER W.
3	83-MS1-006-010		GRILL FRAME ASSY
4	83-MS1-009-010		PANEL TW. ASSY
5	82-VS3-601-010		SPEAKER WOOFER
6	83-096-614-010		SPEAKER CORD

■ ACCESSORIES／PACKAGE LIST

DESCRIPTIONで判断できない物は“REFERENCE NAME LIST”を参照してください。
If can't understand for Description please kindly refer to “REFERENCE NAME LIST”.

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
1	83-MA1-902-118		IB, E(GWENT)〈EXCEPT ZN, EEN〉
2	83-MA1-903-019		IB, E(S'PORE)〈ZN, EEN〉
3	83-MA1-701-018		RC-TZ720〈EXCEPT ZN, EEN〉
4	83-MA1-701-019		RC-TZ720〈ZN, EEN〉
5	87-006-225-019		AM LOOP ANT NC2〈ZNE, ZN〉
6	87-006-226-019		AM LOOP ANT CON2〈EXCEPT ZNE, ZN〉
7	87-043-115-019		ANT, FEEDER FM〈EXCEPT ZNE, ZN〉
8	87-043-106-019		FM, WIRE ANT(Z)〈ZNE, ZN〉

REFERENCE NAME LIST

ELECTRICAL SECTION

DESCRIPTION	REFERENCE NAME
ANT	ANTENNAS
C-	CHIP
C-CAP	CAP, CHIP
C-CAP TN	CAP, CHIP TANTALUM
C-COIL	COIL, CHIP
C-DI	DIODE, CHIP
C-DIODE	DIODE, CHIP
C-FET	FET, CHIP
C-FOTR	FILTER, CHIP
C-JACK	JACK, CHIP
C-LED	LED, CHIP
C-RES	RES, CHIP
C-SFR	SFR, CHIP
C-SLIDE SW	SLIDE SWITCH, CHIP
C-SW	SWITCH, CHIP
C-TR	TRANSISTOR, CHIP
C-VR	VOLUME, CHIP
C-ZENER	ZENER, CHIP
CAP, CER	CAP, CERA-SOL
CAP, E	CAP, ELECT
CAP, M/F	CAP, FILM
CAP, TC	CAP, CERA-SOL
CAP, TC-U	CAP, CERA-SOL SS
CAP, TN	CAP, TANTALUM
CERA FIL	FILTER, CERAMIC
CF	FILTER, CERAMIC
DL	DELAY LINE
E/CAP	CAP, ELECT
FILT	FILTER
FLTR	FILTER
FUSE RES	RES, FUSE
MOT	MOTOR
P-DIODE	PHOTO DIODE
P-SNSR	PHOTO SENSER
P-TR	PHOTO TRANSISTOR
POLY VARI	VARIABLE CAPACITOR
PPCAP	CAP, PP
PT	POWER TRANSFORMER
PTR, RES	PTR, MELF
RC	REMOTE CONTROLLER
RES NF	RES, NON-FLAMMABLE
RESO	RESONATOR
SHLD	SHIELD
SOL	SOLENOID
SPKR	SPEAKER
SW, LVR	SWITCH, LEVER
SW, RTRY	SWITCH, ROTARY
SW, SL	SWITCH, SLIDE
TC CAP	CAP, CERA-SOL
THMS	THERMISTOR
TR	TRANSISTOR
TRIMMER	CAP, TRIMMER
TUN-CAP	VARIABLE CAPACITOR
VIB, CER	RESONATOR, CERAMIC
VIB, XTAL	RESONATOR, CRYSTAL
VR	VOLUME
ZENER	DIODE, ZENER
ｻｰｼﾞｻﾌﾟﾚｯｻ	SERGESUPPRESSOR
ｾﾗｺﾝ	CAP, CERA

サービス技術ニュース	
番号	連絡内容
G－　－	
G－　－	
G－　－	

MECHANICAL SECTION

DESCRIPTION	REFERENCE NAME
ADHESHIVE	SHEET ADHESHIVE
AZ	AZIMUTH
BAR-ANT	BAR-ANTENNA
BAT	BATTERY
BATT	BATTERY
BRG	BEARING
BTN	BUTTON
CAB	CABINET
CASS	CASSETTE
CHAS	CHASSIS
CLR	COLLAR
CONT	CONTROL
CRSR	CURSOR
CU	CUSHION
CUSH	CUSHION
DIR	DIRECTION
DUBB	DUBBING
FL	FRONT LOADING
FLY-WHL	FLYWHEEL
FR	FRONT
FUN	FUNCTION
G-CU	G-CUSHION
HDL	HANDOL
HIMERON	CLOTH
HINGE, BAT	HINGE, BATTERY
HLDR	HOLDER
HT-SINK	HEAT SINK
IB	INSTRUCTION BOOKLET
IDLE	IDLER
IND, L-R	INDICATOR, L-R
KEY, CONT	KEY, CONTROL
KEY, PRGM	KEY, PROGRAM
KNOB, SL	KNOB, SLIDE
LBL	LABEL
LID, BATT	LID, BATTERY
LID, CASS	LID, CASSETTE
LVR	LEVER
P-SP	P-SPRING
PANEL, CONT	PANEL, CONTORL
PANEL, FR	PANEL, FRONT
PRGM	PROGRAM
PULLY, LOAD MO	PULLY, LOADING MOTOR
RBN	RIBBON
S-	SPECIAL
SEG	SEGMENT
SH	SHEET
SHLD-SH	SHIELD-SHEET
SL	SLIDE
SP	SPRING
SP-SCREW	SPECIAL-SCREW
SPACER, BAT	SPACER, BATTERY
SPR	SPRING
SPR-P	P-SPRING
SPR-PC-PUSH	P-SPRING, C-PUSH
T-SP	T-SPRING
TERM	TERMINAL
TRIG	TRIGGER
TUN	TUNING
VOL	VOLUME
W	WASHER
WHL	WHEEL
WORM-WHL	WORM-WHEEL
ｼﾞｸｱｰﾑ	ARM, SHAFT
ｼﾞｸｶﾞｲﾄﾞ	GUIDE, SHAFT
ｽﾄﾗｯﾌﾟ	STRAP
ﾄｸﾅﾍﾞ	S-SCRW
ﾋﾝｼﾞ	HINGE
ﾋﾝｼﾞﾋﾞｽ	S-SCRW
ﾋﾞｽｾﾚｰﾄ	SCRW, SERRART

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